

# Air Permit Major Amendment Application

## Otter Tail Ag Enterprises, LLC

MPCA Permit ID# 11100077-001

*Prepared for:*

Otter Tail Ag Enterprises, LLC  
24096 – 170<sup>th</sup> Avenue  
Fergus Falls, MN 55637-7518

*Prepared by:*

Natural Resource Group, LLC  
1000 IDS Center  
80 South Eighth Street  
Minneapolis, MN 55402

March 2008



# **Air Permit Major Amendment Application**

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Prepared for:

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24096 – 170<sup>th</sup> Avenue  
Fergus Falls, MN 55637-7518

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1000 IDS Center  
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Minneapolis, MN 55402

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## **1.0 INTRODUCTION**

Otter Tail Ag Enterprises LLC, (OTA) submits this application to amend the current issued air permit, number 11100077-001, for the facility located in Fergus Falls, Minnesota. OTA requests the following changes to reflect its as built configuration.

- 1) removal of stacks SV002, SV003, SV004, SV005, SV006,SV007, SV009, and SV010 from the permit
- 2) route emission units EU001-EU008 to SV001
- 3) route emission units EU009-EU012 to SV008
- 4) route emission units EU013-EU016 to SV011
- 5) revise SV001, SV008 and SV011 stack parameters in MPCA database to the parameters listed in Table 1.0-1
- 6) update MPCA database with three cooling tower cells from the eight originally permitted and update the discharge parameters for the cooling towers
- 7) clarify that corn dump pit #2 has two openings but only one may operate at a given time due to physical design constraints of the conveyor system
- 8) remove modeling stack parameters condition from permit
- 9) rename EU008 "Scalper" and vent to SV008

For items 1 through 5 above, the baghouse controls for grain receiving, DDGS shipping, and hammermilling have been consolidated. The same level of control is being implemented but the flow rates have changed. Therefore, there is a small increase in the facility potential to emit (PTE) but it is still well below 100 tons per year.

Item 6 is a simple revision that does not change the facility PTE because the circulating flow rate remains unchanged.

As indicated in item 7 above, OTA has two truck dump pits and one rail dump pit for grain receiving. The rail dump pit was installed as an emergency unit that will only be used in rare occasions and may not be used when grain is being received by truck at corn dump pit #2 or when DDGS is being shipped. The grain can not be conveyed from the rail dump area simultaneously with the truck pit portion of corn dump pit #2 due to physical limitations of the conveying equipment. In addition, the rail pit opening is located under the DDGS loadout area, which means that DDGS can not be shipped when receiving grain at the rail opening. The potential emissions from the facility remain unchanged because worst case emissions occur when receiving grain by truck at corn dump pits #1 and #2.

In addition to the as-built changes, OTA wishes to permit a third Hammermill (EU055 – Hammermill #3) to act as a spare that will be installed in parallel to the other two hammermills in order to ensure that the facility has two available hammermills at all times, including times of maintenance/repair of any one hammermill. No more than two of the hammermills will be operated at any given time, so the facility PTE will not change as a result of this addition.



**Table 1.0-1 Revised PM Emission Limits**

Source ID		Stack Height (ft)		Stack Diameter (ft)		Exit Velocity (m/s)		Flowrate (acfm)	
Emission Unit	Stack ID	As Permitted	As Built	As Permitted	As Built	As Permitted	As Built	As Permitted	As Built
EU001	SV001	92.00	96.25	3.16	3.67	10.46	17.77	16,150	37,000
EU002									
EU003									
EU004									
EU056									
EU005									
EU006									
EU007									
EU008									
EU009	SV008	30.00	40.00	1.83	3.00	11.59	17.10	6,000	23,800
EU010									
EU011									
EU012									
EU055									
EU013	SV011	25.00	33.00	0.67	1.4	0.01	15.84	1,800	4,800
EU014									
EU015									
EU016									

Included with this application are revised emission calculations (Appendix A), a process flow diagram (Appendix B) and a facility site layout (Appendix C). Appendix D contains the applicable Minnesota Pollution Control Agency (MPCA) permit modification application forms. Appendix E contains a marked up copy of MPCA Permit No 11100077-001 that reflects the requested changes identified in this application.

OTA will remain a synthetic minor source with respect to both Title V permitting and New Source Review. Emissions of all criteria pollutants will be less than 100 tons per year with all proposed pollution control equipment in operation.

## 2.0 REQUESTED CHANGES

### 2.1 Revised Emission Limits

**Table 2.1-1 Revised PM/PM<sub>10</sub> Emission Limits**

Source	Current Limit (lb/hr)	Proposed Limit (lb/hr)
SV001 – Grain Receiving and Handling	1.38	3.17
SV008 – Grain Hammermilling	0.51	2.04
SV011 – DDGS Handling and Loadout	0.16	0.41

A summary of OTA's potential to emit (PTE) is presented in Table 2.1-2. Emission calculations have been completed for PM, PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, VOCs, CO and both individual and combined HAPs (Ind. HAPs and Comb. HAPs).

**Table 2.1-2 Revised PTE**

	PM (tpy)	PM <sub>10</sub> (tpy)	SO <sub>2</sub> (tpy)	NO <sub>x</sub> (tpy)	VOC (tpy)	CO (tpy)	Ind. HAP (tpy)	Comb. HAP (tpy)
Current	79.1	63.4	13.8	94.9	94.9	94.9	9.0	12.4
Revised	83.9	68.2	13.8	94.9	94.9	94.9	9.0	12.4
Net Increase	4.8	4.8	---	---	---	---	---	---

## **APPENDIX A**

### Emission Calculations

Otter Tail Ag Enterprises, LLC												
Limited Potential to Emit Emissions @ 65.0 million gallons ethanol production												
Stack/	Control	Emission		Criteria Pollutants (Limited Emissions)							HAP Emissions	
Vent	Eq.	Unit	Emission Sources Associated with	PM	PM10	PM2.5	SO2	NOx	VOC	CO	HAP (Single) Acetaldehyde	HAP (Total)
ID	ID	ID	Ethanol Operations	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)
---	---	EU001	Corn Dump Pit/Auger#1	CE001	CE001	CE001	---	---	---	---	---	---
---	---	EU002	Corn Conveyor#1	CE001	CE001	CE001	---	---	---	---	---	---
---	---	EU003	Corn Elevator#1	CE001	CE001	CE001	---	---	---	---	---	---
---	---	EU004	Corn Dump Pit/Auger#2 <sup>FN1</sup>	CE001	CE001	CE001	---	---	---	---	---	---
---	---	EU005	Corn Conveyor#2	CE001	CE001	CE001	---	---	---	---	---	---
---	---	EU006	Corn Elevator#2	CE001	CE001	CE001	---	---	---	---	---	---
---	---	EU007	Transfer Conveyor#1	CE001	CE001	CE001	---	---	---	---	---	---
SV001	CE001	---	Grain Receiving Baghouse	13.89	13.89	13.89	---	---	---	---	---	---
---	---	EU008	Scalper	CE008	CE008	CE008	---	---	---	---	---	---
---	---	EU009	Reclaim System	CE008	CE008	CE008	---	---	---	---	---	---
---	---	EU010	Grinder Surge Bin	CE008	CE008	CE008	---	---	---	---	---	---
---	---	EU011	Hammermill#1	CE008	CE008	CE008	---	---	---	---	---	---
---	---	EU012	Hammermill#2	CE008	CE008	CE008	---	---	---	---	---	---
---	---	EU055	Hammermill #3	CE008	CE008	CE008	---	---	---	---	---	---
SV008	CE008	---	Hammermill Baghouse	8.94	8.94	8.94	---	---	---	---	---	---
---	---	EU013	DDGS Storage Reclaim	CE011	CE011	CE011	---	---	---	---	---	---
---	---	EU014	Bulkweigher	CE011	CE011	CE011	---	---	---	---	---	---
---	---	EU015	DDGS Conveyor	CE011	CE011	CE011	---	---	---	---	---	---
---	---	EU016	DDGS Load Spout	CE011	CE011	CE011	---	---	---	---	---	---
SV011	CE011	---	DDGS Loadout Baghouse	1.80	1.80	1.80	---	---	---	---	---	---
SV012	CE012	EU017	Cooling Tower Cell#1	3.65	3.65	3.65	---	---	---	---	---	---
SV013	CE013	EU018	Cooling Tower Cell#2	3.65	3.65	3.65	---	---	---	---	---	---
SV014	CE014	EU019	Cooling Tower Cell#3	3.65	3.65	3.65	---	---	---	---	---	---
FS001	(CE001)	(EU001, EU004)	Grain Receiving Fug.	2.38	0.53	0.09	---	---	---	---	---	---
FS002	13.89	(EU016)	DDGS Loadout Fug.	0.18	0.04	0.04	---	---	---	---	---	---
FS003	(CE011)	(EU013)	DDGS Storage Fug.	0.53	0.13	0.13	---	---	---	---	---	---
FS004	CE020	EU025	Truck Traffic	16.51	3.22	0.48	---	---	---	---	---	---
SV020	CE021	EU026	Fire Pump (test only)	0.20	0.20	0.20	0.11	1.03	0.03	0.05	neg	neg
SV021	CE022	EU027	Emergency Generator (500hrs)	0.09	0.09	0.09	0.09	3.27	0.06	0.55	neg	neg
SV022	CE023	EU028	Boiler#1	2.93	2.93	2.93	0.23	20.24	2.12	18.21	neg	0.73
SV023	CE024	EU029	Boiler#2	2.93	2.93	2.93	0.23	20.24	2.12	18.21	neg	0.73
SV024	CE025	EU030	Dedicated Fleet EtOH Loadout	(FN2)	(FN2)	(FN2)	(FN2)	(FN2)	18.92	(FN2)	neg	0.40
---	---	EU031	Non-dedicated Fleet EtOH Loadout	---	---	---	---	---	CE026	---	CE026	CE026
SV025	CE026	EU032	Loadout Flare	0.01	0.01	0.01	neg	0.57	(FN2)	1.34	(FN2)	(FN2)
---	---	EU033	Yeast Tank	---	---	---	---	---	CE027	---	CE027	CE027
---	---	EU034	Fermenter#1	---	---	---	---	---	CE027	---	CE027	CE027
---	---	EU035	Fermenter#2	---	---	---	---	---	CE027	---	CE027	CE027
---	---	EU036	Fermenter#3	---	---	---	---	---	CE027	---	CE027	CE027
---	---	EU037	Fermenter#4	---	---	---	---	---	CE027	---	CE027	CE027
---	---	EU038	Beerwell	---	---	---	---	---	CE027	---	CE027	CE027
SV026	CE027	---	CO2 Scrubber	---	---	---	---	---	22.29	---	7.61	7.78
---	---	EU039	Liquefaction Tank	---	---	---	---	---	CE028	---	CE028	CE028
---	---	EU040	Beer Stripper	---	---	---	---	---	CE028	---	CE028	CE028
---	---	EU041	Side Stripper	---	---	---	---	---	CE028	---	CE028	CE028
---	---	EU042	Rectifier	---	---	---	---	---	CE028	---	CE028	CE028
---	---	EU043	Molecular Sieve	---	---	---	---	---	CE028	---	CE028	CE028
---	---	EU044	Evaporator	---	---	---	---	---	CE028	---	CE028	CE028
---	---	EU045	Centrifuge#1	---	---	---	---	---	CE028	---	CE028	CE028
---	---	EU046	Centrifuge#2	---	---	---	---	---	CE028	---	CE028	CE028
---	---	EU047	Centrifuge#3	---	---	---	---	---	CE028	---	CE028	CE028
---	---	EU048	Centrifuge#4	---	---	---	---	---	CE028	---	CE028	CE028
---	---	EU049	Centrate Tank	---	---	---	---	---	CE028	---	CE028	CE028
SV027	CE028	---	Vent Gas Scrubber	---	---	---	---	---	5.03	---	0.28	0.30
---	CE029	EU050	DDGS Dryer	CE030	CE030	CE030	---	---	CE030	CE030	CE030	CE030
---	---	EU051	DDGS Cooler	CE030	CE030	CE030	---	---	CE030	CE030	CE030	CE030
SV028	CE030	EU052	RTO	22.57	22.57	22.57	13.13	49.56	34.57	56.54	1.11	2.46
FS005	CE031	EU053	Equipment Leaks	---	---	---	---	---	8.43	---	---	---
FS006	CE032	EU054	Wetcake (AOS)	---	---	---	---	---	(FN3)	---	(FN3)	(FN3)
SV029	CE033	TK001	200 Proof Tank	---	---	---	---	---	0.16	---	neg	neg
SV030	CE034	TK002	200 Proof Tank	---	---	---	---	---	0.16	---	neg	neg
SV031	CE035	TK003	Denaturant Storage Tank	---	---	---	---	---	0.69	---	neg	0.0131
SV032	CE036	TK004	Denatured Ethanol Tank#1	---	---	---	---	---	0.15	---	neg	0.0007
SV033	CE037	TK005	Denatured Ethanol Tank#2	---	---	---	---	---	0.15	---	neg	0.0007
TOTALS				83.9	68.2	65.0	13.8	94.9	94.9	94.9	9.0	12.4
Total Facility Emission Originally Permitted				79.1	63.4	60.2	13.8	94.9	94.9	94.9	9.0	12.4
Emission Change due to the Modification				4.8	4.8	4.8	0.0	0.0	0.0	0.0	0.0	0.0

(FN1) Corn Dump Pit #2 has two openings (one for truck and one for rail) grain may be removed from only one opening at a time due the physical limitations of the conveyor. There are less emissions associated with rail receiving than with truck receiving therefore the potential emissions remain based on truck receiving only.

(FN2) Product (denatured Ethanol) occurs to either of two scenarios. Loading to a dedicated fleet (carry only denatured ethanol) or loading to a non-dedicated fleet (may have previously carried gasoline. Dedicated Fleet loadout is not flared. Non-dedicated loadout is flared. Potential to emit is based on worst case emissions from either scenario. Dedicated fleet loadout is worst case for VOC, Non-dedicated is worst case for PM, NOx and CO due to use of a flare.

(FN3) FS006 Wetcake (AOS) is an alternate operating scenario that is not worst case for emissions therefore does not contribute to facility Potential to Emit.

**Otter Tail Ag Enterprises, LLC**  
**Grain Handling Point Source Emissions**

**Emission Calculation Method**

Controlled Emissions (short term) = Air Flow Rate (dscfm) x Outlet Concentration (gr/dscfm) x 60 min/hr x 1lb/7,000gr = lb/h

Controlled Emissions (long term) = Average Short Term emissions (lb/hr) x 4.38 tpy/(lb/hr) = tpy

**Limited Potential to Emit Emissions**

Stack/Vent Unit ID	Emission Source	Air Flow Rate DSCFM	Outlet Concentration gr/dscf	Controlled PM / PM10 / PM2.5 Emissions	
				(lb/hr)	(tpy)
SV001	Grain Receiving Baghouse	37,000	0.010	3.17	13.89
SV008	Hammermill Baghouse	23,800	0.010	2.04	8.94
SV011	DDGS Loadout Baghouse	4,800	0.010	0.41	1.80

All PM size fractions are assumed to be equal (to be conservative) because size data is not available.

**Otter Tail Ag Enterprises, LLC**  
**Cooling Tower Emissions**

**Potential to Emit Estimate**

Circulating Flow Rate (gallons/minute)	Circulating Flow Rate (gallons/hour)	Total Drift (% circulating flow)	Total Drift (gal/hr)	Total Drift (lb/hr)	TDS Concentration (ppm)	PM/PM10 Emissions (lb/hr)	PM/PM10 Emissions (ton/yr)
40,000	2,400,000	0.005%	120	1000	2500.0	2.50	10.95
			SV012	EU017	Cooling Tower Cell#1	0.83	3.65
			SV013	EU018	Cooling Tower Cell#2	0.83	3.65
			SV014	EU019	Cooling Tower Cell#3	0.83	3.65

Peak circulating flow rate is calculated to be 33,000 gal/min. The PTE emission calculations have been based on 40,000 gal/min, chosen as a round conservative number greater than is expected to be seen at the facility in practice.

**Otter Tail Ag Enterprises, LLC  
Fugitive Dust Emissions**

All emission factors are from EPA's AP-42 guidance.			Emission Factors		
	Table	SCC Code or Description	PM (lb/ton)	PM10 (lb/ton)	PM2.5 (lb/ton)
Grain Receiving Fug. (Truck)	9.9.1-1	(SCC 3-02-007-41) --> (3-02-005-5	0.0350	0.0078	0.0013
Grain Receiving Fug. (Rail)	9.9.1-1	(SCC 3-02-007-41) --> (3-02-005-5	0.0320	0.0078	0.0013
DDGS Loadout Fug.	9.9.1-2	(SCC 3-02-008-03)	0.0033	0.0008	0.0008
DDGS Storage Fug.	9.9.1-2	(SCC 3-02-008-03) x 3 operations	0.0099	0.0024	0.0024

PM (Total)							
ID#	Description	Annual Average Throughput ton/hr	Emission Factor lb/ton	Uncontrolled lb/hr	Capture / Prevention Efficiency %	Fugitive Emissions lb/hr	Fugitive Emissions tpy
FS001	Grain Receiving Fug. (Truck)	77.52	0.0350	2.713	80%	0.543	2.377
FS002	DDGS Loadout Fug.	24.23	0.0033	0.080	50%	0.040	0.175
FS003	DDGS Storage Fug.	24.23	0.0099	0.240	50%	0.120	0.525

PM10 (less than 10 microns in diameter)							
ID#	Description	Annual Average Throughput ton/hr	Emission Factor lb/ton	Uncontrolled lb/hr	Capture / Prevention Efficiency %	Fugitive Emissions lb/hr	Fugitive Emissions tpy
FS001	Grain Receiving Fug.	77.52	0.0078	0.605	80%	0.121	0.530
FS002	DDGS Loadout Fug.	24.23	0.0008	0.019	50%	0.010	0.042
FS003	DDGS Storage Fug.	24.23	0.0024	0.058	50%	0.029	0.127

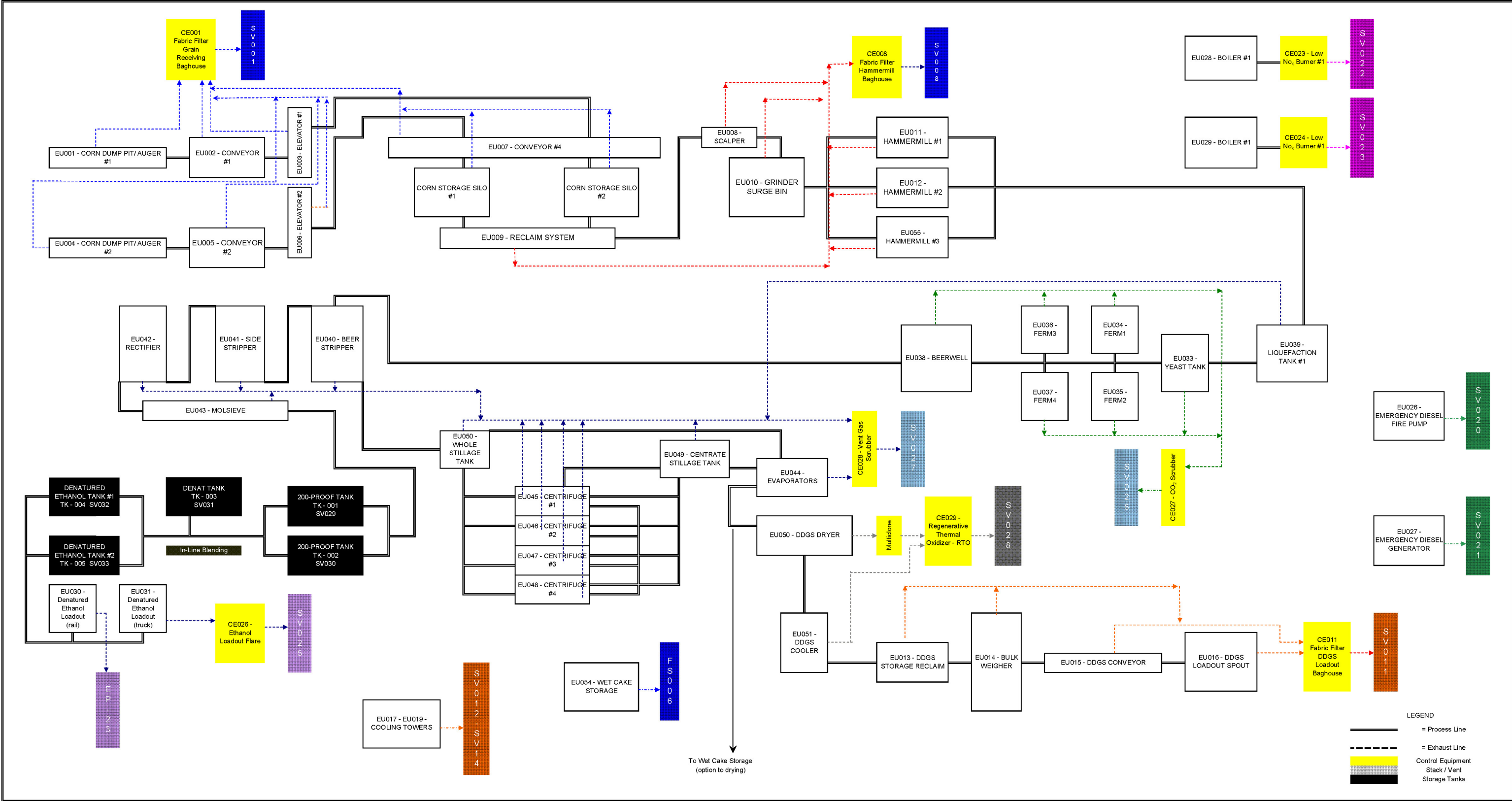
PM2.5 (less than 2.5 microns in diameter)							
ID#	Description	Annual Average Throughput ton/hr	Emission Factor lb/ton	Uncontrolled lb/hr	Capture / Prevention Efficiency %	Fugitive Emissions lb/hr	Fugitive Emissions tpy
FS001	Grain Receiving Fug.	77.52	0.0013	0.101	80%	0.020	0.088
FS002	DDGS Loadout Fug.	24.23	0.0008	0.019	50%	0.010	0.042
FS003	DDGS Storage Fug.	24.23	0.0024	0.058	50%	0.029	0.127

\* Rail receiving emissions are less than those of truck receiving, therefore, PM fugitive emissions assume all grain receiving by truck (worse case) at Corn Dump Pit #2.

## **APPENDIX B**

Updated Process Flow Diagram







**Process Flow Diagram**

**Otter Tail Ag Enterprises, LLC**

Fergus Falls, Minnesota

DATE: 3/4/2008

REVISED: AAB

SCALE: NTS

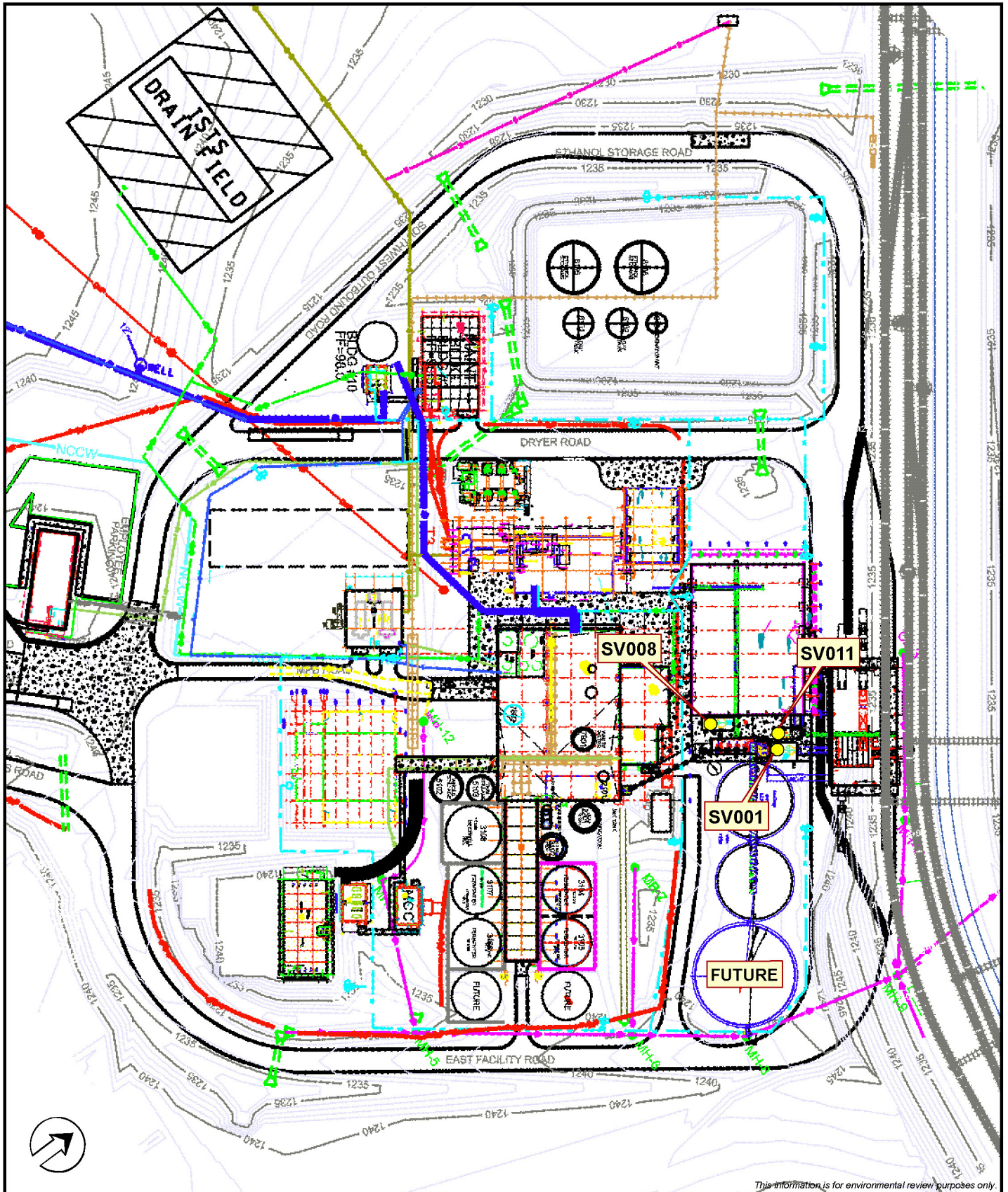
DRAWN BY: RMSCHULTA



## **APPENDIX C**

### Updated Facility Site Layout





**Figure 1**  
**Site Layout with New Stacks**  
 Ottertail Ag Enterprises  
 Fergus Falls, Minnesota

## **APPENDIX D**

### **MPCA Modification Application Forms**



# Minnesota Pollution Control Agency

520 LAFAYETTE ROAD  
ST. PAUL, MN 55155-4194

## PERMIT CHANGE FORM **CH-14** **COMPLETE APPLICATION CHECKLIST** (FORMERLY MOD-17 COMPLETE APPLICATION CHECKLIST)

October 25, 2006

1a) AQ Facility ID No.: 11100077 1b) AQ File No. \_\_\_\_\_

2) Facility Name: Otter Tail Ag Enterprises, LLC

Minn. R. 7007.0600 describes what a complete permit application must include. Please note that a complete permit application for the modification must be included with this submittal or the application will be deemed incomplete. The following information must be included in your application **if it applies to the modification**. Please complete the following checklists, as applicable, to verify that you have included all the needed information.

### All applications or notifications

- ☒ CH-CP-01      ☒ CH-CR-01      ☒ CH-00  
☒ CH-GI-01      ☒ CH-01  
☒ CH-02      ☒ CH-14  
☐ CR-03 (when you are requesting confidentiality)

### All Applications for Major, Moderate, or Minor Amendments

- ☒ CH-03      ☒ CH-11  
☒ CH-04      ☒ CH-13  
☐ CH-04a (existing major sources under NSR)  
☒ CH-04b (existing non-major sources under NSR)  
☒ CH-05      ☒ CD-01  
☒ CH-06      ☒ GI-07  
☒ CH-07

### Additional Requirements for Some Major Amendments

- ☐ Limits required because of performance testing or modeling results, if not already incorporated into your permit (photocopies of MPCA correspondence fulfills this requirement)  
☐ GI-09H, and a CAM Submittal (including a CAM Plan), if so indicated by Form GI-09H  
☐ EMS-00, if permit is to incorporate Environmental Management System (EMS) provisions

### Additional Requirements for Moderate or Minor Amendments

- ☐ CH-10

### All Applications for Administrative Amendments

- ☒ CH-08

### Contravening Permit Terms

- ☐ CH-09      ☐ CH-12

### Notifications for Changes Not Requiring a Permit

- ☐ CH-12

### Additional Forms Dependent on Change Requested

- ☐ PAL-01, PAL-02, MI-02c (to request a new PAL under NSR)  
☒ GI-02 (to describe changes in process flow)  
☒ GI-03 (to describe changes in stack layout)  
☒ GI-04 (to describe new, removed, or changed stacks)  
☒ GI-05a (to describe new, removed, or changed control equipment)  
☐ HE-01/CR-02 (to describe and certify hood efficiency associated with new or changed control equipment not collecting through a total enclosure)  
☒ GI-05b (to describe new, removed, or changed emissions units)  
☐ GI-05c (to describe new, removed, or changed storage tanks)  
☐ GI-05d (to describe new, removed, or changed fugitive sources)  
☐ HG-01 (for taconite production secondary metal production, fuel combustion for electricity generation or industrial boilers, or incinerators, if there is any increase in mercury emissions)



AIR QUALITY  
520 LAFAYETTE ROAD  
ST. PAUL, MN 55155-4194

PERMIT CHANGE FORM **CH-CR-01**  
**CERTIFICATION**  
03/31/04

1a) AQ Facility ID No.: 11100077-001  
1b) AQ File No.: \_\_\_\_\_  
2) Facility Name.: Otter Tail Ag Enterprises, LLC

You must sign this certification if you are applying for an amendment to your air quality permit, or if you are providing the agency with a notification required in Minn. R. 7007.0100 to 7007.1850.

I certify that:

- a) Emissions resulting from all modifications are as stated in this application.
- b) The modification(s) listed are not part of a larger project which would be subject to additional requirements.
- c) I understand that if I modify my facility before I am issued an air emission permit, I do so at my own risk.
- d) I understand that the modification(s) that I make to my facility before I am issued an air emission permit must be in compliance with any state and federal regulations and proposed permit conditions.
- e) I understand that protection offered by the "permit shield" of Minn. R. 7007.1400 does not apply to minor or moderate permit amendments.
- f) If I am applying for change of ownership/operational control, I am willing to comply with the terms of the existing permit.

Person certifying this permit application:

Mr./Ms.: Mr. Kelly Longtin  
Title: CEO/General Manager  
Signature: \_\_\_\_\_  
Phone: (218) 998-4301 Fax: (218) 998-4302  
Date: \_\_\_\_\_



# Minnesota Pollution Control Agency

520 LAFAYETTE ROAD ST. PAUL, MN 55155-4194

PERMIT CHANGE FORM **CH-GI-01**  
**FACILITY INFORMATION**  
October 25, 2006

1a) AQ Facility ID No.: 11100077

1b) AQ File No.: \_\_\_\_\_

2) Facility Name: Otter Tail Ag Enterprises, LLC

3) Facility Location:  
Street Address: 24096 - 170<sup>th</sup> Avenue  
  
City: Fergus Falls County: Otter Tail ZIP Code: 56537-7518

Mailing Address: Otter Tail Ag Enterprises, LLC  
24096 170<sup>th</sup> Avenue  
City: Fergus Falls State: MN ZIP Code: 56537-7518

4) Corporate/Company Owner:  
Name: Otter Tail Ag Enterprises, LLC  
Mailing Address: 24096 170<sup>th</sup> Avenue  
  
City: Fergus Falls State: MN ZIP Code: 56537-7518

Owner Classification: ☒ Private ☐ Local Govt ☐ State Govt. ☐ Federal Govt. ☐ Utility

5) Corporate/Company Operator (if different than owner):  
Name: Mr. Kelly Longtin  
Mailing Address: Otter Tail Ag Enterprises, LC  
2496 - 170<sup>th</sup> Avenue  
City: Fergus Falls State: MN ZIP Code: 56537-7518

6) Co-permittee (if applicable):  
Name: N/A  
Mailing Address: \_\_\_\_\_  
  
City: \_\_\_\_\_ State: \_\_\_\_\_ ZIP Code: \_\_\_\_\_

7) Legally responsible official for this permit/facility:  
Mr/Ms: Mr. Kelly Longting Phone: (218) 998-4301  
Title: Chief Executive Officer (CEO)/General Manager Fax: (218) 998-4302  
At (check one): ☒ Owner Address ☐ Operator Address ☐ Emission Facility Address  
☐ Other (specify) \_\_\_\_\_

8) Contact person for this permit:  
Mr/Ms: Paul Mordorski Phone: (612) 347-6794  
Title: Air Quality Engineer Fax: (612) 347-6780  
At (check one): ☐ Owner Address ☐ Operator Address ☐ Emission Facility Address

☒ Other (specify) 1000 IDS Center, 80 South Eighth St. Minneapolis, MN 55402  
E-mail address: prmordorski@nrg-llc.com

9) All billings for annual fees should be addressed to:

Mr/Ms: Mr. Kelly Longtin Phone: (218) 993-4301

Title: Chief Executive Officer (CEO)/General Manager Fax: (218) 998-4302

At (check one): ☒ Owner Address ☐ Operator Address ☐ Emission Facility Address

☐ Other (specify) \_\_\_\_\_

10) Standard Industrial Classification (SIC) Code and description for the facility:

Primary: 2869 / Industrial Organic Chemicals (Fuel Ethanol Facilities using natural fermentation are now specifically excluded from the PSD Synthetic Organic Chemicals Source Category)

Secondary (if applicable): \_\_\_\_\_ / \_\_\_\_\_

Tertiary (if applicable): \_\_\_\_\_ / \_\_\_\_\_

11) Primary product produced (or activity performed) at the facility is:

Fuel grade ethanol and distillers grains animal feeds

12) Facility is: ☒ Stationary ☐ Portable

13) (reserved for future use)

14) Is environmental review required (either an Environmental Assessment Worksheet (EAW) or an Environmental Impact Statement (EIS)) for this facility?

☒ No ☐ Yes -- you may also be required to perform a state air toxics review for your facility. Please call (800) 646-6247 or locally (651) 297-2274.

15) Are you (or will you be, if this is a new facility) required to submit a Toxics Release Inventory (Form R) under SARA Title 313 for this facility? Call the Minnesota Emergency Planning and Community Right-to-Know Act (EPCRA) Program for more information, at 651-297-7372.

☒ Yes – Answer Question 15a ☐ No – Go on to Question 16

15a) Are you required to submit a Pollution Prevention Plan Progress Report in accordance with Minn. Stat. § 115D.08?

☐ No ☒ Yes, and the most recently required progress report has been submitted  
☐ Yes, but a progress report has not been submitted because: (fill in reason below)

\_\_\_\_\_  
\_\_\_\_\_

16) Is this facility within 50 miles of another state or the Canadian border?:

☒ Yes (specify which ones) ND SD ☐ No

17) Are you proposing any alternative operating or emissions trading scenarios in this application? (see Minn. R. 7007.0800, subp. 10 and 11)

☒ No ☐ Yes - attach a description of your proposal, including a statement on how the proposal will meet all applicable requirements (specifically, please address any applicable New Source Review requirements - see Form CH-04).

18) Person preparing this permit application:

Mr. / Ms. Paul Mordorski



Title: Air Quality Engineer  
Phone: (612)347-6794 Fax: (612)347-6780 Date: 2/29/2008  
E-mail address pmordorski@nrg-llc.com



# Minnesota Pollution Control Agency

AIR QUALITY 520 LAFAYETTE ROAD ST. PAUL, MN 55155-4194

PERMIT CHANGE FORM **CH-CP-01**  
**COVER PAGE**  
01/31/07

- 1a) AQ Facility ID No.: 11100077
- 1b) AQ File No.: \_\_\_\_\_
- 2) Facility Name: Otter Tail Ag Enterprises, LLC
- 3) Date: 3/6/2008
- 4) **THIS APPLICATION IS FOR AN AMENDMENT TO A (Check Permit Type):**
- ☐ Part 70 or PSD/NSR Permit
  - ☐ State Permit
  - ☐ No current permit to amend
- 5) **THIS CHANGE OR NOTIFICATION IS FOR (Check as many boxes as apply):**
- ☒ A Major Permit Amendment (Minn. R. 7007.1500)
    - ☐ includes a Major Modification under NSR
      - Send a complete copy of the application to EPA Region V – see instructions
      - Contact EPA Region V to begin the Endangered Species Assessment process – see instructions
    - ☐ includes establishment or modification of a PAL
    - ☐ includes incorporation of EMS provisions
    - ☐ A Reconstruction or Modification of NSPS Affected Facility Not Subject to NSR (Minn. R. 7007.1500, subp. 3a.)
  - ☐ A Moderate Permit Amendment (Minn. R. 7007.1450, subp. 3)
  - ☐ A Minor Permit Amendment (Minn. R. 7007.1450, subp. 2)
  - ☐ An Administrative Amendment (Minn. R. 7007.1400)
  - ☐ An Installation or Modification of a Part 61 NESHAP and/or a Part 60 NSPS Affected Facility at a Stationary Source with Potential-to-Emit below all Permit Thresholds (Minn. R. 7007.0500, subp. 2.C.(1))
  - ☐ A Notification of Accumulated Insignificant Activities (Minn. R. 7007.1250)
  - ☐ A Notification of Installation of Pollution Control Equipment (Minn. R. 7007.1150(C))
  - ☐ A Notification of Replacement of a Unit (Minn. R. 7007.1150(C))
  - ☐ A Notification of Changes That Contravene a Permit Term (Minn. R. 7007.1350)
- 6) **CONFIDENTIALITY:**
- ☐ This application contains material which is claimed to be confidential under Minn. Stat. §§ 13.37 subd. 1(b) and 116.075. Complete and attach Form CR-03. Your submittal must include both Confidential and Public versions of your application.
  - ☐ Confidential Copy of Application attached
  - ☐ Public Copy of Application attached



**Minnesota Pollution  
Control Agency**

520 Lafayette Road North  
St. Paul, MN 55155-4194

**CH-00**

**Project Screening**  
Air Quality Permit Program

AQ Facility ID No.: 111000777-01 AQ File No: \_\_\_\_\_

Facility Name: Otter Tail Ag Enterprises, LLC

Fill out this form last, after you've determined the type of permit you need.

Check all applicable boxes on this form that describe your proposed project and your facility.

**Applicable analyses:**

- ☐ My project requires an Environmental Assessment Worksheet.  
Submitted to (who?): \_\_\_\_\_ on (date): \_\_\_\_\_
- ☐ My project requires an Environmental Impact Statement.  
Submitted to (who?): \_\_\_\_\_ on (date): \_\_\_\_\_
- ☐ My project requires a Prevention of Significant Deterioration (PSD) permit, utilizes the Plant-wide Applicability Limit requirements of 40 CFR § 52.21, and/or involves a Best Available Control Technology (BACT) Analysis (either a new analysis or revisions to previous permit conditions).
- ☐ My project involves a case-by-case Maximum Achievable Control Technology (MACT) determination under section 112(g)(2)(B) of the Clean Air Act Amendments of 1990 as described on form CH-07.
- ☐ My project involves a site-specific alternative monitoring request under 40 CFR § 60.13(i) or 40 CFR § 63.8(f).
- ☐ My project involves changes to limits or requirements that are identified as State Implementation Plan (SIP) requirements in my permit or Administrative Order.
- ☐ My project involves ambient air dispersion modeling for criteria pollutants.
- ☐ My project involves an Air Emissions Risk Analysis (AERA).  
Submitted to (who?): \_\_\_\_\_ on (date): \_\_\_\_\_
- ☐ My project requires at least one other media permit in addition to an air permit.  
\_\_\_\_\_  
(list permits: e.g., NPDES permit).
- Application submitted to (who?): \_\_\_\_\_ on (date): \_\_\_\_\_
- ☒ None of the above

**Industry Sector:**

- ☐ Petroleum refining
- ☐ Pulp and/or paper mill
- ☐ Composite wood products (e.g., OSB)
- ☐ Metallic mining
- ☒ Non-beverage ethanol production
- ☐ Waste combustor
- ☐ Electric utility
- ☐ None of the above



# Minnesota Pollution Control Agency

520 LAFAYETTE ROAD ST. PAUL, MN 55155-4194

PERMIT CHANGE FORM **CH-01**

## CHANGE DESCRIPTION

(FORMERLY MOD-01 MODIFICATION DESCRIPTION)

6/30/05

Use Form CH-02 to determine if a permit amendment is required for your proposed change or modification. If an amendment is required, provide below a description of each physical and operational change, or proposed change to existing permit conditions, included in this application. This includes addition of new units, removal or replacement of existing units, or changes which may result in debottlenecking of emission units.

1a) AQ Facility ID No.: 11100077-001

1b) AQ File No.

2) Facility Name.: Otter Tail Ag Enterprises, LLC

3) Does your project involve construction or a physical or operational change to your facility?

☐ No. Go to question 5

☒ Yes. ☒ Construction or physical change ☐ Operational change

4) Do you need your permit issued by a certain date?

☐ No. Go to question 5

☒ Yes. Date: As soon as practicable

Reason: The facility is scheduled to start up on March 10, 2008 and would like to have the permit revised as soon as practicable.

5) Description of proposed project

Otter Tail's amendment application requests the following revisions:

- removal of stacks SV002, SV003, SV004, SV005, SV006, SV007, SV009, SV010 from the permit

-route emission units EU001-EU008 to SV001

-revise SV001 stack parameters in MPCA database to the following

stack height: 96.25 ft

stack diameter: 3.67 ft

exit velocity: 17.77 m/s

flowrate: 37,000 acfm

-route emission units EU009-EU012 to SV008

-revise SV008 stack parameters in MPCA database to the following

stack height: 40.0 ft

stack diameter: 3.0 ft

exit velocity: 17.10 m/s

flowrate: 23,800 acfm

-route emission units EU013-EU016 to SV011

-revise SV011 stack parameters in MPCA database to the following:

stack height: 33 ft

stack diameter: 1.4 ft

exit velocity: 15.84 m/s

flowrate: 4,800 acfm

-remove SV015, SV016, SV017, SV018, and SV019 from permit

-remove stack parameters permit condition, due to the nature of the source and because an AERA was not required; PM10 was modeled as per MPCA request but not specifically required by rule

- add Hammermill #3 (EU055) for future installation in parallel to existing hammermills and route to Hammermill Baghouse (SV008)

-revise SV012, SV013, and SV014 stack parameters in MPCA database to the following:

stack height: 36.7 ft

stack diameter: 25 ft

exit velocity: 22.95 ft/s

flowrate: 676,072 acfm

- rename EU008 – Scalper and route to SV008

**6) Attach Form CD-01 to specify which applicable requirements need to be added or deleted from your permit.**



AIR QUALITY  
520 LAFAYETTE ROAD  
ST. PAUL, MN 55155-4194

PERMIT CHANGE FORM **CH-02**  
**ACTION TYPE DETERMINATION**  
(FORMERLY MOD-02 MODIFICATION CLASSIFICATION FLOW CHART)  
03/07/06

1a) AQ Facility ID No.: 11100077-001      1b) AQ File No. \_\_\_\_\_  
2) Facility Name.: Otter Tail Ag Enterprises, LLC

Answer the questions on this form, referring to and completing the additional forms as directed, to determine if a permit or amendment is required (and if so what type), or if a notification is required.

3. Does the proposed change or modification require a major amendment? Complete Form CH-03 and all forms referenced therein.

- ☒ Yes. Go to question 8.  
☐ No. Go to question 4.

4. Does the entire proposed change or modification consist only of insignificant activities described in Minn. R. 7007.1300, subparts 2 and/or 3?

- ☐ Yes. The proposed change qualifies as an insignificant modification. Use Form CH-12 to determine if notification to the MPCA is required. If notification is required, go to Form CH-14 to determine what must be submitted.  
☐ No. Part of the project is not one of the listed insignificant activities listed in Minn. R. 7007.1300, subparts 2 and/or 3. Go to question 5.

5. Can the change be done through an administrative amendment? Use Form CH-08 to determine Yes or No.

- ☐ Yes. Go to Form CH-14 to determine what must be submitted.  
☐ No. Go to question 6.

6. Can the change be made through the "contravening permit terms" provision? Use Form CH-09 to determine Yes or No.

- ☐ Yes. Go to Form CH-14 to determine what must be submitted.  
☐ No. Go to question 7.

7. Calculate the emissions increase as described on Form CH-10. Is there an increase?

- ☐ Yes. Complete Form CH-10 to determine if a minor or moderate amendment is needed. If a minor or moderate amendment is needed, go to question 8. If the change qualifies as an insignificant modification, keep records and use Form CH-12 to determine if notification is required.  
☐ No. Complete Form CH-12 to determine what notification or recordkeeping requirements apply.

8. Complete Form CH-11 to determine your status with regard to crossing permit thresholds, and indicate that status below.

☒ This change can be made through the permit amendment provisions of Minn. R. 7007.1450 or 7007.1500, using the forms indicated on Form CH-14.

☐ This change requires issuance of a Title V or State operating permit. Include a completed Total Facility Application.

9. Complete Form CH-13 to determine what state rules apply to the equipment you are adding or the changes you are proposing.

10. Complete Form CH-00, summarizing the category of change and industry type.



AIR QUALITY  
520 LAFAYETTE ROAD  
ST. PAUL, MN 55155-4194

PERMIT CHANGE FORM **CH-03**  
**MAJOR PERMIT AMENDMENT**  
**DETERMINATION**  
(FORMERLY MOD-10 MAJOR PERMIT AMENDMENT DETERMINATION)  
06/30/05

To answer the questions posed in this form, you will have to complete the additional forms referenced in the individual items.

This form refers to proposed “changes” and “modifications.” A “modification” as defined at Minn. R. 7007.0100, subp. 14, includes

- A. any change that constitutes a title I modification ...; or
- B. any physical change or change in the method of operation of an emissions unit, emission facility, or stationary source that results in an increase in the emission of a regulated air pollutant.

A “change” is a change to permit terms or conditions, in the absence of a modification as described above.

1a) AQ Facility ID No.: 11100077-001

1b) AQ File No.

2) Facility Name: Otter Tail Ag Enterprises, LLC

3) Is the proposed change or modification a title I modification? It is if the answer to any of the following is “yes”:

3a) Is the proposed change or modification subject to New Source Review? Use and submit Forms CH-04, CH-04a, and/or CH-04b, as applicable.

☐ YES ☒ NO

3b) Is the proposed change or modification a modification or reconstruction as defined for New Source Performance Standards? Use and submit Form CH-05.

☐ YES ☒ NO

3c) Is the proposed change or modification a hazardous air pollutant modification under Part 61 NESHAPs? Use and submit Form CH-06.

☐ YES ☒ NO

3d) Is the proposed change or modification defined as construction or reconstruction under Part 63 NESHAPs? Use and submit Form CH-07.

☐ YES ☒ NO

4) Does this modification change any permit conditions or amend existing permit requirements related to **monitoring, reporting, or record keeping** other than adding new requirements, eliminating the requirements if they are rendered meaningless because they apply to emissions that will no longer occur, or changing test methods if both the new and the old test methods are considered valid for the pollutant and source category (Minn. R. 7007.1500, subp. 1(A))?

☒ YES. Use and submit Form CD-01 to document such requirements. ☐ NO

5) Does this modification establish or amend any **source-specific permit condition** that is required to be based on a case-by-case determination of an emissions limit or standard, an ambient impacts



analysis, visibility, or increment analysis (e.g., a modeling-based limit, BACT, MACT, etc.) (Minn. R. 7007.1500, subp. 1(B))?

☐ YES. Use and submit Form CD-01 to document such conditions. ☒ NO

- 6) Does this modification establish or amend any permit terms or conditions for which there is no underlying applicable requirement and that you have assumed to avoid an applicable requirement to which you would otherwise be subject? Such limits are usually synthetic minor limitations such as a limit on hours of operation. Please note that if you would like to add equipment under an existing emissions cap or limit, and the permit does not explicitly pre-authorize such additions, that is considered amending the limit or emissions cap. (Minn. R. 7007.1500, subp. 1(C)).

☒ YES. Use and submit Form CD-01 to document such conditions. ☐ NO

- 7) Does this modification establish, amend, renew, or distribute a **Plantwide Applicability Limit** under 40 CFR § 52.21(aa)? (This is only available to existing major sources under New Source Review.)

☐ YES. Use and submit Forms PAL-01 (and the forms referenced within PAL-01) and CD-01 to document conditions. (As of the date of this form, the PAL cover page (PAL-01) and the form for determination of a PAL (PAL-02) have been completed. The remaining forms for renewal, expiration allocation, and increasing a PAL, are not yet available.)

☒ NO

- 8) Is this modification subject to classification as a **major permit amendment under any other agency rule?**

☐ YES ☒ NO

- 9) Does this modification seek to establish or amend a federally enforceable emission cap (such as a synthetic minor limit which limits hours of operation) which avoids classification as a part 70 source?

☒ YES. Use and submit Form CD-01 to document conditions. ☐ NO

**If you answered "YES" to one or more of the above questions, a major permit amendment is required.**



AIR QUALITY  
520 LAFAYETTE ROAD  
ST. PAUL, MN 55155-4194

PERMIT CHANGE FORM **CH-04**

## DETERMINATION OF NEW SOURCE REVIEW STATUS

(FORMERLY FORM MOD-04 DETERMINATION OF NEW SOURCE REVIEW)  
06/30/05

1) Is your facility defined as one of the following types of facilities?

Some SIC Code(s) applying to specific categories are given in parentheses to assist you in classifying your facility. Please refer to the instructions if you have any questions filling out this form.

Coal Cleaning Plants-With Thermal Dryers	Kraft Pulp Mills (2611, 2621)
Portland Cement Plants (3241)	Primary Zinc Smelters (3339)
Iron and Steel Mills (332X)	Primary Aluminum Ore Reduction Plants (3334)
Primary Copper Smelters (3331)	Municipal Incinerators Capable of Charging More Than 250 Tons of Refuse per Day
Hydrofluoric Acid Plants (2819, 2899)	Sulfuric Acid Plants (2819)
Nitric Acid Plants (2873)	Petroleum Refineries (2911)
Lime Plants (3274)	Phosphate Rock Processing Plants (1475)
Coke Oven Batteries (3312)	Sulfur Recovery Plants (2819)
Carbon Black Plants (Furnace Process, 2895)	Primary Lead Smelters (3339)
Fuel Conversion Plants	Sintering Plants*
Secondary Metal Production Plants (334X)	Chemical Process Plants (28XX)
Fossil-Fuel Boilers (or combination thereof) totaling more than 250 MMBtu/hr heat input	Petroleum Storage & Transfer Units, Total Storage Capacity over 300,000 Barrels
Taconite Ore Processing Plants (1011)	Glass Fiber Processing Plants
Charcoal Production Plants (2819, 2861)	Fossil Fuel-Fired Steam Electric Plants of more than 250 MMBtu/hr heat input

\* Processing of fine grain materials into coarser lumps (performed primarily on ores).

- ☒ NO, my facility is not classified as one of the 28 sources listed above. An air emission source not classified as one of the 28 sources listed above and having the potential to emit (PTE) 250 tons per year (tpy) or more of any single regulated NSR pollutant is considered a major stationary source. **For item 2 of this form, and for Form CH-04b, a 250-tpy emissions threshold must be used.**
- ☐ YES, my facility is classified as one of the 28 sources listed above. A listed air emission source having a potential to emit (PTE) 100 tons per year (tpy) or more of any single regulated NSR pollutant is considered a major stationary source. For sources classified as one of the 28 listed, fugitive emissions must be included in the PTE. **For item 2 of this form, and for Form CH-04b, a 100-tpy emissions threshold must be used.**

2) Is the current federally enforceable, PTE of your facility greater than or equal to the 100/250 tpy threshold for your facility, making your facility a major stationary source?

- ☐ YES, my facility is currently considered a major stationary source. Go to question 3.
- ☒ NO, go to Form CH-04b.

- 3) Is your facility currently covered by a permit that contains a Plantwide Applicability Limit (“actuals PAL”) as defined at 40 CFR Section 52.21(aa)(2)(i) and (v)?
- ☐ Yes. Go to question 4.
- ☐ No. Go to question 5.
- 4) Are you able to continue to meet the emissions limits set by the Plantwide Applicability Limit after the project?
- ☐ Yes. NSR is not applicable to the proposed change/modification. You need not complete the remainder of this form. You must determine if an amendment is needed under Minn. R. 7007.1150 – 7007.1500.
- ☐ No. You must complete a BACT analysis for all major and significant emissions units at your source. If installation of BACT still does not allow you to install the emission unit and maintain compliance with your PAL, you may apply for an increase in your PAL. Please see the MPCA factsheet on PALs at [www.pca.state.mn.us/air/permits/nsr](http://www.pca.state.mn.us/air/permits/nsr), or Form PAL-05 (*not yet available as of the date of this form*), for guidance on increasing a PAL. Do not complete the remainder of this form.
- 5) **Synthetic Minor Source:** Are you proposing federally enforceable synthetic minor limits on the PTE of the facility to make the entire facility (including the proposed modification) a synthetic minor source?
- ☐ YES. Submit an application for a major amendment. Put proposed limits on CD-01 form. Do *not* complete CH-04a or CH-04b.
- ☐ NO. Go to Form CH-04a.



# Minnesota Pollution Control Agency

520 LAFAYETTE ROAD ST. PAUL, MN 55155-4194

## PERMIT CHANGE FORM **CH-04b** DETERMINATION OF INCREASES AT NON-MAJOR SOURCES

01/31/2007

1a) AQ Facility ID No.: 11100077-001

1b) AQ File No.: \_\_\_\_\_

2) Facility Name: Otter Tail Ag Enterprises, LLC

**Use this Form to calculate emissions increases at existing sources which are not major NSR sources. If the facility is a major source under NSR, use Form CH-04a.**

See instructions for calculating emissions. Make copies of this page if more than four emission units are affected. Attach your calculations.

**Table 1**

	EU <u>1-7</u> <input type="checkbox"/> New <input type="checkbox"/> Replacement <input checked="" type="checkbox"/> Modified <input type="checkbox"/> Debottlenecked	EU <u>8-12,55</u> <input type="checkbox"/> New <input type="checkbox"/> Replacement <input checked="" type="checkbox"/> Modified <input type="checkbox"/> Debottlenecked	EU <u>13-16</u> <input type="checkbox"/> New <input type="checkbox"/> Replacement <input checked="" type="checkbox"/> Modified <input type="checkbox"/> Debottlenecked	EU _____ <input type="checkbox"/> New <input type="checkbox"/> Replacement <input type="checkbox"/> Modified <input type="checkbox"/> Debottlenecked	
POLLUTANT	Potential Emissions (tpy)	Potential Emissions (tpy)	Potential Emissions (tpy)	Potential Emissions (tpy)	TOTAL (tpy)
PM	0.64	3.95	0.22		4.81
PM <sub>10</sub>	0.64	3.95	0.22		4.81
NO <sub>x</sub>					
SO <sub>2</sub>					
CO					
Ozone (VOC)					
Lead					
Fluorides					
Sulfuric acid mist					
Total Reduced Sulfur including H <sub>2</sub> S					
Total Reduced Sulfur Compounds including H <sub>2</sub> S					
MWC Organics					
MWC Acid Gas					
MSW Landfill Gas					

**Table 2 - Summary**

POLLUTANT	Emissions from new, modified, or replacement units (from Table 1) (tpy)	Thresholds for minor sources ("No" to CH-04 question 2) (tpy)	
		Answered "Yes" to CH-04 question 1	Answered "No" to CH-04 question 1
PM	4.81	100	250
PM <sub>10</sub>	4.81	100	250
NO <sub>x</sub>		100	250
SO <sub>2</sub>		100	250
CO		100	250
Ozone (VOC)		100	250
Lead		100	250
Fluorides		100	250
Sulfuric acid mist		100	250
Total Reduced Sulfur including H <sub>2</sub> S		100	250
Total Reduced Sulfur Compounds including H <sub>2</sub> S		100	250
MWC Organics <sup>1</sup>		100	250
MWC Acid Gas <sup>2</sup>		100	250
MWC Metals <sup>3</sup>		100	250
MSW Landfill Gas		100	250

Note 1 - MWC Organics means Municipal Waste Combustor Organics. These are defined as total tetra-thro-octa-chlorinated dibenzo-para-dioxins and dibenzofurans.

Note 2 - MWC acid gases are measured as the sum of sulfur dioxide and hydrochloric acid.

Note 3 - MWC Metals are measured as particulate matter.



AIR QUALITY

520 LAFAYETTE ROAD  
ST. PAUL, MN 55155-4194

PERMIT CHANGE FORM **CH-05**  
**APPLICABILITY OF NSPS**  
(FORMERLY MOD-05 APPLICABILITY OF NSPS)  
05/17/04

Complete this form to determine if the proposed change or modification results in new applicability of a New Source Performance Standard listed in Table 1.

- 1a) AQ Facility ID No.: 11100077-001
- 1b) AQ File No. \_\_\_\_\_
- 2) Facility Name: Otter Tail Ag Enterprises, LLC
- 3) Is there a NSPS for a source category which includes the unit(s) you are installing, modifying, or reconstructing?
- ☐ Yes. Go to question 4
- ☒ No. Done with this Form. Answer "No" to question 3b) on Form CH-03.
- 4) Complete Question 4a) – 4c) for each new, modified, or reconstructed unit which may be subject to an NSPS following the proposed project. (Copy as necessary.)

4a) Unit	4b) NSPS Subpart(s) that may apply after project	4c) Do all of the NSPS listed in column 4b) for the unit listed in column 4a) currently apply (prior to the proposed project)? If this is a new unit, the answer is "no."
		<input type="checkbox"/> Yes – done with this unit <input type="checkbox"/> No
		<input type="checkbox"/> Yes – done with this unit <input type="checkbox"/> No
		<input type="checkbox"/> Yes – done with this unit <input type="checkbox"/> No
		<input type="checkbox"/> Yes – done with this unit <input type="checkbox"/> No
		<input type="checkbox"/> Yes – done with this unit <input type="checkbox"/> No

- 5) Did you check "no" in column 4c) for any unit in the table in question 4)?
- ☐ No. This indicates that NSPS currently applies to all units and there will be no newly applicable NSPS as a result of the proposed project. Done with this form. Answer "no" to question 3b on Form CH-03.
- ☐ Yes. Complete the remainder of this form for each unit for which you checked "no" in the last column of the table in question 4.
- 6) Installing a new unit to which the NSPS will apply?
- ☐ No. Go to Question 7).
- ☐ Yes – Complete Questions 6a) – 6e) for each new unit. (Copy as necessary.)

6a)	Emission Unit Number	_____
6b)	Emission Unit/Equipment Description	_____
6c)	Stack/Vent Number	_____
6d)	Date of Equipment Manufacture or Installation	(Month/Date/Year)



AIR QUALITY  
520 LAFAYETTE ROAD  
ST. PAUL, MN 55155-4194

PERMIT CHANGE FORM **CH-06**  
**APPLICABILITY OF PART 61 NESHAP**  
(FORMERLY MOD-06 APPLICABILITY OF PART 61 NESHAP)  
03/31/04

Complete this form to determine if the proposed change or modification results in new applicability of a Part 61 NESHAP listed in Table 1.

1a) AQ Facility ID No.: 11100077-001

1b) AQ File No. \_\_\_\_\_

2) Facility Name.: Otter Tail Ag Enterprises, LLC

3) Is there a Part 61 NESHAP for a source category which includes the unit(s) you are installing, modifying, or reconstructing?

☐ Yes. Go to question 4

☒ No. Done with this Form. Answer "No" to question 3c) on Form CH-03.

4) Complete Question 4a) – 4c) for each new, modified, or reconstructed unit which may be subject to a Part 61 NESHAP following the proposed project. (Copy as necessary.)

4a) Unit	4b) Part 61 Subpart(s) that may apply after project	4c) Do all of the NESHAPs listed in column 4b) for the unit listed in column 4a) currently apply (prior to the proposed project)? If this is a new unit, the answer is "no."
		<input type="checkbox"/> Yes – done with this unit <input type="checkbox"/> No
		<input type="checkbox"/> Yes – done with this unit <input type="checkbox"/> No
		<input type="checkbox"/> Yes – done with this unit <input type="checkbox"/> No
		<input type="checkbox"/> Yes – done with this unit <input type="checkbox"/> No
		<input type="checkbox"/> Yes – done with this unit <input type="checkbox"/> No

5) Did you check "no" in column 4c) for any unit in the table in question 4)?

☐ No. This indicates that NESHAP currently applies to all units and there will be no newly applicable NESHAPs as a result of the proposed project. Done with this form. Answer "no" to question 3c on Form CH-03.

☐ Yes. Complete the remainder of this form for each unit for which you checked "no" in the last column of the table in question 4.

6) Installing new equipment which will cause a Part 61 NESHAP to apply?

☐ No - Go to question 7).

☐ Yes – Complete 6a) – 6c) for each new unit. (Copy as necessary.) Use Form CD-01 to document the proposed methods of compliance. Include a highlighted photocopy of the standard.

6a)	Emission Unit Number	_____
6b)	Emission Unit/Equipment Description	_____
6c)	Stack/Vent Number	_____

7) Physical or operational change to an existing unit such that a Part 61 NESHAP will apply?

☐ No. Go to question 9).

☐ Yes - Complete 7a) for each modified unit. (Copy as necessary.) Then go to question 8).

7a) Emission Unit ID No.:			
Pollutant	Emission Rate after change (lb/hr)	Emission Rate before change (lb/hr)	Change in Emission Rate (lb/hr)

8) Is there an increase in the emission rate of any of the pollutants regulated by the Part 61 NESHAP?

☐ No. Go to question 9).

☐ Yes – Complete questions 8a) – 8c) for each modified unit. (Copy as necessary.) Use Form CD-01 to document the proposed methods of compliance. Include a highlighted photocopy of the standard.

8a)	Emission Unit/Equipment Description	
8b)	Stack/Vent Number	
8c)	Date of Modification (expected)	(Month/Date/Year)

9) Check all that apply

☐ If you answered “yes” or “no” to question 6) and “no” to question 7) or 8), a major amendment is not needed under Minn. R. 7007.1500, subp. 1.D. Answer “no” to Question 3c) on Form CH-03. Another type of permit amendment may be required.

☐ If you answered “yes” or “no” to question 6) and “yes” to question 8), this change or modification requires a major amendment under Minn. R. 7007.1500, subp. 1.D. Answer “yes” to Question 3c) on Form CH-03.

☐ If you answered “yes” to question 6) or 8), **but the total facility potential-to-emit remains below all permit thresholds**, you are required to obtain a permit only for the emission unit(s) subject to the Part 61 NESHAP.





AIR QUALITY

520 LAFAYETTE ROAD  
ST. PAUL, MN 55155-4194PERMIT CHANGE FORM **CH-07****APPLICABILITY OF PART 63 NESHAP**  
(FORMERLY MOD-07 APPLICABILITY OF PART 63 NESHAP)

03/07/06

- 1a) AQ Facility ID No.: 11100077-001
- 1b) AQ File No. \_\_\_\_\_
- 2) Facility Name: Otter Tail Ag Enterprises, LLC

**Questions 3-8 apply to emission changes due to the proposed change or modification (including construction of a new facility); they do not apply to unchanged portions of an existing facility.**

- 3) Does this permit application seek authorization to construct or reconstruct a major source of HAP (10 tpy or more of any pollutant listed on Table A, or 25 tpy or more of any combination of pollutants listed in Table A, before any proposed permit limits are considered)?

- ☐ Yes. Answer "yes" to question 3d) on Form CH-03. Go on to question 4.
- ☒ No. Go on to question 4.

- 4) Does this permit application seek authorization to construct or reconstruct equipment belonging to any of the area source categories listed below? If so, place a check in the box next to that category and read the specified NESHAP for Source Categories to determine all applicable requirements for area sources. The rules for these source categories may apply even if your facility is not considered a major source for hazardous air pollutants.

- ☐ Hard and Decorative Chromium Electroplating (40 CFR pt. 63, subp. N)
- ☐ Chromium Anodizing Tanks (40 CFR pt. 63, subp. N)
- ☐ Ethylene Oxide Commercial Sterilization and Fumigation Operations (40 CFR pt. 63, subp. O)
- ☐ Perchloroethylene Dry Cleaning Facilities (40 CFR pt. 63, subp. M)
- ☐ Secondary Aluminum Processing Facilities (40 CFR pt. 63, subp. RRR)
- ☐ Halogenated Solvent Degreasers (40 CFR pt. 63, subp. T)

- ☐ Yes. If you answered "yes" to question 3, go on to question 5. If you answered "no" to question 3, you are finished with this form, and should answer "no" to question 3d) on Form CH-03.
- ☒ No. If you answered "yes" to question 3, go on to question 5. If you answered "no" to question 3, Part 63 NESHAP is not applicable. You are finished with this form. Answer "no" to question 3d) on Form CH-03.

- 5) Not considering any limits you may be proposing, would your proposed project be subject to any of the standards listed in Table B?

- ☐ Yes. Go to question 6.
- ☐ No, my facility may be subject to preconstruction review requirements under section 112(g)(2)(B). Go to question 7.

- 6) If you answered "Yes" to question 5, it may be possible to avoid applicability of the MACT standard for the proposed project by proposing a federally enforceable permit conditions to limit your potential HAP emissions to less than 10 tons per year for each HAP and/or 25 tons per year for all HAPs combined from the new proposed project. Do you want to accept permit limitations on HAPs to avoid the MACT requirement?

- ☐ No. Read the applicable MACT standard to determine all applicable requirements. Use form CD-01 to describe the requirements and your proposed methods of compliance demonstration. Include a photocopy of the standard with the applicable portions highlighted.
- ☐ Yes. Go to question 8.

- 7) If you answered "No" to question 5, it may be possible to avoid the section 112(g)(2)(B) requirement of performing a case-by-case MACT determination for your proposed project by proposing a federally enforceable permit conditions to limit your potential HAP emissions to less than 10 tons per year for each HAP and/or 25 tons per year for all HAPs combined from the new proposed project. Do you want to accept permit limitations on HAPs to avoid the section 112(g)(2)(B) requirement?

- ☐ No. Read 40 CFR § 63.43 to 63.44 to determine all applicable requirements, including application requirements for a case-by-case MACT determination and what is required for your facility when a subsequent MACT standard for your facility is promulgated. Provide your proposed case-by-case MACT determination with this application, using Form CD-01 to describe your proposed limits and methods of compliance demonstration.
- ☐ Yes. Go to question 8.

- 8) Briefly describe the limitations you would be willing to accept and abide by in your permit so that your HAP emissions will not exceed 10 tons per year for each HAP and 25 tons per year for all HAPs combined (use separate sheet if needed). Description must include all the HAP pollutants. Refer to the Application General Instructions for guidance in establishing these limitations, and include your proposed limit, monitoring, recordkeeping, and reporting on Form CD-01. Your facility may be subject to NESHAP for Source Categories requirements until you receive a federally enforceable permit limiting your facility's HAP emissions from the proposed project to below the major source thresholds. After providing your proposed limitations, you are finished with this form.

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AIR QUALITY  
520 LAFAYETTE ROAD  
ST. PAUL, MN 55155-4194

PERMIT CHANGE FORM **CH-08**  
**ADMINISTRATIVE AMENDMENT**  
**DETERMINATION**  
(FORMERLY MOD-03 ADMINISTRATIVE AMENDMENT DETERMINATION)  
04/15/04

1a) AQ Facility ID No.: 11100077-001

1b) AQ File No.:

2) Facility Name.: Otter Tail Ag Enterprises, LLC

Permit changes described on this form may be made through the administrative permit amendment process. Please verify that the proposed change does not require a major amendment:

**I answered "no" to all questions on Form CH-03**

☒ No. I answered "yes" to one or more questions on Form CH-03. This means that the proposed change requires a major amendment, and the administrative amendment process is not applicable.

☐ Yes. To apply for an administrative amendment, indicate which of the following completely describes the change needed to your permit.

- ☐ A. an amendment to correct a typographical error;
- ☐ B. an amendment to change the name, mailing address, or telephone number of any person identified in the permit, or that reflects a similar minor administrative change at the permitted facility. A change in the stationary source's location of operation is not covered by this item;
- ☐ C. an amendment requiring the permittee to comply with additional, more frequent, or expanded testing, monitoring, recordkeeping, or reporting requirements;
- ☐ D. an amendment to eliminate monitoring, recordkeeping, or reporting requirements if:
- the requirements are rendered meaningless because the only emissions to which the requirements apply will no longer occur;
- the change is to eliminate one validated reference test method for a pollutant and source category in order to add another;
- the requirements are redundant to or less strict than other existing requirements;
- the requirements are technically incorrect and their elimination does not affect the accuracy of the data generated or of the monitoring information recorded or reported; or
- the piece of equipment to which the monitoring, recordkeeping, or reporting requirement applies no longer exists or has been permanently disabled from use at the stationary source.

- ☐ E. an amendment reflecting a change in ownership or operational control of a stationary source where the agency determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittee has been submitted to the agency;
- ☐ F. an amendment to incorporate into a permit the requirements from preconstruction review permits issued by the MPCA, incorporate into a permit the requirements from standards adopted under Code of Federal Regulations, title 40, part 63, as amended (National Emission Standards for Hazardous Air Pollutants for Source Categories), or to lower the plantwide emission limits in permits with Plantwide Applicability Limits to reflect the impact of standards adopted under Code of Federal Regulations, title 40, part 63, as amended;
- ☐ G. an amendment to clarify the meaning of a permit term;

NOTE: Administrative amendments cannot make substantive changes to permit

- ☐ H. an amendment to extend a deadline in a permit by no more than 120 days, provided that the MPCA may only extend a deadline established by an applicable requirement described in Minn. R. 7007.0100, subp. 7(A)-(K), if the Agency has been delegated authority to make such extensions by the administrator of EPA. Notwithstanding the previous sentence, the MPCA may do an administrative amendment to extend a testing deadline in a permit up to 365 days if the MPCA finds that the extension is needed to allow the permittee to test at worst case conditions as required by Minn. R. 7017.2025, subp. 2;
- ☐ I. an amendment to remove any condition from a permit which was based on an applicable requirement that has been repealed, but only if the permit condition:

is neither required nor replaced by another applicable requirement; and

was not established for a specific facility to protect human health and the environment, to prevent pollution, as a mitigation measure in an environmental impact statement, or to obtain a negative declaration in an environmental assessment worksheet, and

- ☐ J. an amendment to correct or update a citation to an applicable requirement where the corresponding permit condition is not changed.
- ☐ K. an amendment to include operating conditions that ensure that waste combustors emit mercury at less than 50 percent of the applicable standard.

If any of the above are checked, and the checked change completely describes your proposed changes (i.e., there is nothing else that is being changed other than what is indicated on this form), then the change qualifies for an administrative amendment. Answer “yes” to Question 5 on Form CH-02. Attach a sheet describing the section of the permit that is to be amended and your proposed new permit conditions. You may wish to submit a marked-up copy of the relevant portions of your existing permit to provide this information clearly.



AIR QUALITY  
520 LAFAYETTE ROAD  
ST. PAUL, MN 55155-4194

PERMIT CHANGE FORM **CH-11**  
**CROSSING PERMIT THRESHOLDS**  
(FORMERLY MOD-12 CROSSING PERMIT THRESHOLDS)  
03/31/04

1a) AQ Facility ID No.: 11100077-001

1b) AQ File No.

2) Facility Name.: Otter Tail Ag Enertprises, LLC

Use this form to determine if the proposed changes cause the facility to become subject for the first time to the requirement to obtain either a State or a Part 70 permit. Please attach your documentation.

Total Facility PTE before change	Total Facility PTE after change	Action required
<input type="checkbox"/> Below all permit thresholds	Remains below all permit thresholds and the change does not cause the source or any part to become subject to an NSPS (40 CFR pt. 60) or a Part 61 NESHAP (40 CFR pt. 61.	No permit action required
<input type="checkbox"/> Below all permit thresholds	Remains below all permit thresholds but the change causes the source or any part to become subject to an NSPS (40 CFR pt. 60) or a Part 61 NESHAP (40 CFR pt. 61.	Apply for and receive a permit only for those sources subject to that regulation. Check applicability of registration permit and general permit.
<input type="checkbox"/> Below all permit thresholds	Exceeds a threshold for a State permit but not for a Part 70 permit.	Apply for and receive a permit to construct before beginning actual construction. (See instructions for details.)
<input type="checkbox"/> Below all permit thresholds or above a state permit threshold but below all Part 70 thresholds	Exceeds a threshold for a Part 70 permit	
<input checked="" type="checkbox"/> Above a State permit threshold but below all Part 70 thresholds	Remains above a State permit threshold but below all Part 70 thresholds	You may amend your existing permit. If your operating permit has not been issued, but the application was submitted on time, you may apply for a permit to construct and operate the modification only. If you have not applied for an operating permit, you must apply for and receive either a State or Part 70 permit prior to beginning actual construction.
<input type="checkbox"/> Above Part 70 Threshold	Remains above Part 70 Threshold	



**Minnesota Pollution  
Control Agency**

520 Lafayette Road North  
St. Paul, MN 55155-4194

**CH-13**

**Applicability Of State Rules**  
Air Quality Permit Program

1a) AQ Facility ID No.: 11100077-001

1b) AQ File No. \_\_\_\_\_

2) Facility Name: Otter Tail Ag Enterprises, LLC

Some businesses and activities in Minnesota are subject to the following rules. Read each question to determine if the rule applies to the equipment or processes you are installing or modifying. If so, be sure to include the rule in Form CD-01, if you are required to fill it out for this application.

**3) Minnesota Standards of Performance for Stationary Sources** (Minn. R. ch. 7011)

3a) Will you be installing or modifying equipment that meets the following definition?

"A furnace, boiler or other combustion equipment in Minnesota which burns fossil fuel for the purpose of producing steam, hot water, hot air, or other hot liquid, gas, or solid, where the smoke doesn't have direct contact with the heated medium for which another standard of performance has not been promulgated."

☒ No, my new or modified equipment **is not** subject to Minn. R. 7011.0500-7011.0551. Go to question 3b).

☐ Yes. Is or will the unit(s) be subject to a federal New Source Performance Standard (as identified on Form CH-05)?

☐ Yes, my new or modified equipment **is not** subject to Minn. R. 7011.0500-7011.0551. Go to question 3b).

☐ No, my new or modified equipment **is** subject to Minn. R. 7011.0500-7011.0551. Standards of Performance for Indirect Heating Fossil-Fuel Burning Equipment. (Read the rule to determine the specific requirements that apply.) List the subject unit(s):

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3b) Is your new or modified equipment type or process equipment found in Table 3 on page 7? This table contains only state-specific requirements; it does not contain state rules that incorporate federal rules by reference.

☐ No, none of the Minnesota Rules listed in Table 3 apply to my new or modified equipment. Go to question 4).

☒ Yes, my new or modified equipment may be subject to the rule associated with it in Table 3. Read the associated rule to see if it applies.

3c) After reading through Table 3 and any rule that may apply to your proposed change, list the ones that do apply in Table 1 (next page). Again, Table 3 contains only state-specific requirements; it does not contain state rules that incorporate federal rules by reference. You do not need to list the state rules that incorporate federal rules by reference. You do not need to list the Standards of Performance for Indirect Heating Fossil-Fuel Burning Equipment again, if it applies (see 3a, above).

**Table 1: New/Modified Equipment Subject to Minnesota Standards of Performance**

Emission Source ID Number	Minnesota Rule Part that Applies	What the Rule Part Applies to (Whole facility or Specific Piece of Equipment)
EU001 - EU016, & EU055	7001.1005	Grain and DDGS handling operations are subject to MN performance standard for dry bulk ag commodity facility

**4) Minnesota Acid Deposition Control (Minn. R. 7021.0050)**

- 4a) Does your facility generate electricity?  
☒ No. My facility is not subject to Acid Deposition Control Requirements. Go to question 5.  
☐ Yes. Go to question 4b).
- 4b) Does your facility contain indirect heating equipment with a rated heat input of more than 5,000 million BTUs per hour?  
☒ No. Go to question 4c).  
☐ Yes. My facility (and possibly my proposed change) is subject to Acid Deposition Control Requirements.
- 4c) If your facility is an electric utility, is the total generating capacity of all the electric generating facilities in Minnesota which are owned by your facility's parent company more than 1,000 megawatts?  
☒ No. My facility is not subject to Acid Deposition Control Requirements.  
☐ Yes. My facility (and possibly my proposed change) is subject to Acid Deposition Control Requirements.

**5) Standards of Performance for Industrial Process Equipment (Minn. R. 7011.0700 - 7011.0735)**

- 5a) Are you installing or modifying any industrial process equipment on-site that may generate any air contaminant in any amount and is not regulated by a federal New Source Performance Standard or MN Rules Standard of Performance?  
☐ Yes. List the units in Table 2, then go to item 5b).  
☒ No, my new or modified equipment is not subject to the Industrial Process Equipment rule. Go to question 6).
- 5b) **Opacity Standard**  
(Note: Opacity is a measure of visible emissions or how much of the view is obscured by stack emissions. The emissions causing opacity are often smoke or dust.)
- For industrial process equipment which was *in operation before July 9, 1969*, the equipment shall not exhibit greater than 20 percent opacity, except for one six-minute period per hour of not more than 60 percent opacity. An exceedance of this opacity standard occurs whenever any one-hour period contains two or more six-minute periods during which the average opacity exceeds 20 percent or whenever any one-hour period contains one or more six-minute periods during which the average opacity exceeds 60 percent.
  - For industrial process equipment which was *not in operation before July 9, 1969*, the equipment shall not exhibit greater than 20 percent opacity.
- 5c) Does any of the industrial process equipment you listed in Table 2 have particulate control equipment with a collection efficiency of at least 99 percent if it was in operation before July 9, 1969, or 99.7 percent if it was not in operation before July 9, 1969?  
☐ No. Go to question 5d).  
☐ Yes. These units are considered to be in compliance with the remaining requirements of this rule.
- For those units meeting this criterion which were in operation before July 9, 1969, complete Table 2 by checking the box labeled "Collection Efficiency > 99%."
  - For those units meeting this criterion which were not in operation before July 9, 1969, complete Table 2 by checking the box labeled "Collection Efficiency > 99.7%."
  - Then, if there are units listed in Table 2 which are not controlled by control equipment with a collection efficiency of 99% or 99.7% (as applicable), go on to question 5d).
- 5d) Has it been demonstrated that the operation of the entire facility in compliance with all ambient air quality standards? This is typically shown through some level of computer dispersion modeling.  
☐ Yes. Go to question 5e).  
☐ No. Skip to item 5i).
- 5e) Is the facility located outside of the seven county Minneapolis-St. Paul metropolitan region?  
☐ Yes. Go to question 5f)  
☐ No. Skip to item 5i).
- 5f) Is the facility located outside of the city of Duluth?  
☐ Yes. Go to question 5g).  
☐ No. Skip to item 5i).
- 5g) Is the facility located at least 1/4 mile from any residence or public roadway?  
☐ Yes. Go to question 5h).  
☐ No. Skip to item 5i).
- 5h) Answer this question individually for each remaining unit listed in Table 2 (those which were not identified in item 5c) as being controlled by control equipment having a control efficiency of 99% or 99.7% (as applicable)). Does the industrial process equipment have particulate control equipment with a collection efficiency of at least 85 percent?  
☐ Yes, the unit is considered to be in compliance with the remaining requirements of this rule. For each unit for which you can answer "yes" to question 5h), complete Table 2 by checking the box labeled "Outside MSP & Duluth, 1/4 mile from roads/residences, collection efficiency > 85%." Answer question 5h) for each remaining unit on Table 2.  
☐ No. For each unit for which you answered "No" to question 5h), complete Table 2 as described in item 5i). Then go to question 6).
- 5i) Complete Table 2 for all remaining industrial process equipment listed (those which were not identified in question 5c) as being controlled by control equipment having a control efficiency of 99% or 99.7% (as applicable)). Use Table 4 to determine the particulate limit in either pounds per hour (lb/hr) or grains per dry standard cubic foot (gr/dscf). Then go to question 6).

**Table 2: New/Modified Equipment Subject to Industrial Process Equipment Rule**

Equipment Subject to Industrial Process Equipment Rule (list EU number(s))	Applicable Particulate Limit
<div>_____ <input type="checkbox"/> In operation before July 9, 1969</div> <div>_____ <input type="checkbox"/> Not in operation before July 9, 1969</div>	<div><input type="checkbox"/> Collection Efficiency &gt; 99%</div> <div><input type="checkbox"/> Collection Efficiency &gt; 99.7%</div> <div><input type="checkbox"/> Outside MSP &amp; Duluth, ¼ mile from roads/residences, collection efficiency &gt; 85%</div> <div><input type="checkbox"/> _____ gr/dscf</div> <div><input type="checkbox"/> _____ lb/hr</div>
<div>_____ <input type="checkbox"/> In operation before July 9, 1969</div> <div>_____ <input type="checkbox"/> Not in operation before July 9, 1969</div>	<div><input type="checkbox"/> Collection Efficiency &gt; 99%</div> <div><input type="checkbox"/> Collection Efficiency &gt; 99.7%</div> <div><input type="checkbox"/> Outside MSP &amp; Duluth, ¼ mile from roads/residences, collection efficiency &gt; 85%</div> <div><input type="checkbox"/> _____ gr/dscf</div> <div><input type="checkbox"/> _____ lb/hr</div>
<div>_____ <input type="checkbox"/> In operation before July 9, 1969</div> <div>_____ <input type="checkbox"/> Not in operation before July 9, 1969</div>	<div><input type="checkbox"/> Collection Efficiency &gt; 99%</div> <div><input type="checkbox"/> Collection Efficiency &gt; 99.7%</div> <div><input type="checkbox"/> Outside MSP &amp; Duluth, ¼ mile from roads/residences, collection efficiency &gt; 85%</div> <div><input type="checkbox"/> _____ gr/dscf</div> <div><input type="checkbox"/> _____ lb/hr</div>
<div>_____ <input type="checkbox"/> In operation before July 9, 1969</div> <div>_____ <input type="checkbox"/> Not in operation before July 9, 1969</div>	<div><input type="checkbox"/> Collection Efficiency &gt; 99%</div> <div><input type="checkbox"/> Collection Efficiency &gt; 99.7%</div> <div><input type="checkbox"/> Outside MSP &amp; Duluth, ¼ mile from roads/residences, collection efficiency &gt; 85%</div> <div><input type="checkbox"/> _____ gr/dscf</div> <div><input type="checkbox"/> _____ lb/hr</div>
<div>_____ <input type="checkbox"/> In operation before July 9, 1969</div> <div>_____ <input type="checkbox"/> Not in operation before July 9, 1969</div>	<div><input type="checkbox"/> Collection Efficiency &gt; 99%</div> <div><input type="checkbox"/> Collection Efficiency &gt; 99.7%</div> <div><input type="checkbox"/> Outside MSP &amp; Duluth, ¼ mile from roads/residences, collection efficiency &gt; 85%</div> <div><input type="checkbox"/> _____ gr/dscf</div> <div><input type="checkbox"/> _____ lb/hr</div>
<div>_____ <input type="checkbox"/> In operation before July 9, 1969</div> <div>_____ <input type="checkbox"/> Not in operation before July 9, 1969</div>	<div><input type="checkbox"/> Collection Efficiency &gt; 99%</div> <div><input type="checkbox"/> Collection Efficiency &gt; 99.7%</div> <div><input type="checkbox"/> Outside MSP &amp; Duluth, ¼ mile from roads/residences, collection efficiency &gt; 85%</div> <div><input type="checkbox"/> _____ gr/dscf</div> <div><input type="checkbox"/> _____ lb/hr</div>
<div>_____ <input type="checkbox"/> In operation before July 9, 1969</div> <div>_____ <input type="checkbox"/> Not in operation before July 9, 1969</div>	<div><input type="checkbox"/> Collection Efficiency &gt; 99%</div> <div><input type="checkbox"/> Collection Efficiency &gt; 99.7%</div> <div><input type="checkbox"/> Outside MSP &amp; Duluth, ¼ mile from roads/residences, collection efficiency &gt; 85%</div> <div><input type="checkbox"/> _____ gr/dscf</div> <div><input type="checkbox"/> _____ lb/hr</div>
<div>_____ <input type="checkbox"/> In operation before July 9, 1969</div> <div>_____ <input type="checkbox"/> Not in operation before July 9, 1969</div>	<div><input type="checkbox"/> Collection Efficiency &gt; 99%</div> <div><input type="checkbox"/> Collection Efficiency &gt; 99.7%</div> <div><input type="checkbox"/> Outside MSP &amp; Duluth, ¼ mile from roads/residences, collection efficiency &gt; 85%</div> <div><input type="checkbox"/> _____ gr/dscf</div> <div><input type="checkbox"/> _____ lb/hr</div>
<div>_____ <input type="checkbox"/> In operation before July 9, 1969</div> <div>_____ <input type="checkbox"/> Not in operation before July 9, 1969</div>	<div><input type="checkbox"/> Collection Efficiency &gt; 99%</div> <div><input type="checkbox"/> Collection Efficiency &gt; 99.7%</div> <div><input type="checkbox"/> Outside MSP &amp; Duluth, ¼ mile from roads/residences, collection efficiency &gt; 85%</div> <div><input type="checkbox"/> _____ gr/dscf</div> <div><input type="checkbox"/> _____ lb/hr</div>
<div>_____ <input type="checkbox"/> In operation before July 9, 1969</div> <div>_____ <input type="checkbox"/> Not in operation before July 9, 1969</div>	<div><input type="checkbox"/> Collection Efficiency &gt; 99%</div> <div><input type="checkbox"/> Collection Efficiency &gt; 99.7%</div> <div><input type="checkbox"/> Outside MSP &amp; Duluth, ¼ mile from roads/residences, collection efficiency &gt; 85%</div> <div><input type="checkbox"/> _____ gr/dscf</div> <div><input type="checkbox"/> _____ lb/hr</div>



**6) Waste Combustors** (Minn. R. 7011.1201-7011.1290)

Note: Depending on the type of waste combustor you operate, you may be instructed to fill out one or more of the following forms:

- WC-01 -- Required if you determine that your waste combustor requires a permit.
- WC-02 -- Required if you install/operate a Class IV waste combustor at a hospital.
- WC-03 -- Required if you do not meet the stack height requirements of Minn. R. 7011.1235.

If after reading through the following section, you determine that you are required to fill out one or more of the WC forms, contact the Air Quality Permit Document Coordinator.

**6a) Are you proposing installing or modifying a waste combustor?**

"Waste Combustor" means any emissions unit or emission facility where mixed municipal solid waste, solid waste, or refuse-derived fuel is combusted, and includes incinerators, energy recovery facilities, or other combustion devices. A metals recovery incinerator is a waste combustor. A combustion device combusting primarily wood, or at least 70 percent fossil fuel and wood in combination with up to 30 percent papermill wastewater treatment plant sludge is not a waste combustor. A soil treatment facility, paint burn-off oven, wood heater, or residential fireplace is not a waste combustor.

"Wood" is defined as: wood, wood residue, bark, or any derivative fuel or residue thereof, in any form, including sawdust, sander dust, wood chips, wood scraps, slabs, millings, shavings, and processed pellets made from wood and other forest residues.

A facility that is co-firing Refuse Derived Fuel (RDF) or Municipal Solid Waste (MSW) at rates less than 30 percent by weight is not regulated as a waste combustor, but is regulated as a boiler.

- ☐ Yes, I am installing or modifying a waste combustor. Answer questions 6b through 6e to determine whether you are allowed to continue to operate, and what type of permit the waste combustor requires. Allowed waste combustors must obtain an air emissions permit.
- ☒ No, the facility equipment is not subject to this rule.

**6b) Is the waste combustor solely a crematory, pathological or an animal carcass incinerator?**

- ☐ Yes. It is subject to standards of performance in Minn. R. 7011.1215, subp. 3. The waste combustor is an insignificant activity that does not need to be reported.
- ☐ No, the facility equipment is not subject to this rule.

**6c) Is the design capacity of the waste combustor equal to or greater than 3 million Btu/hr?**

"Design capacity" means: the hourly throughput of the waste combustor unit based on heat input from solid waste to the combustion system as stated by the manufacturer or designer, based on accepted design and engineering practices. For a non-continuous feed system, design capacity means the total heat input from solid waste per cycle.

If you don't have a manufacturer's design capacity in terms of heat input, you may estimate heat input by the following formula:

$$H_{in} = (HHV) \times (R)$$

Where:

$H_{in}$  = Heat input rate

HHV = heat value of waste

R = waste input rate, in lb/hr, as defined by the manufacturer

Commercial/Retail/Institutional Wastes = 7000 Btu/lb

General Industrial Wastes = 9000 Btu/lb

Medical/Infectious Wastes = 10,000 Btu/lb

- ☐ Yes, the waste combustor has a design capacity of 3 million Btu/hr or greater. The waste combustor is subject to the standards of performance applicable to waste combustors. There are also additional permit application requirements for this unit, as described in Minn. R. 7007.0501, or 7011.1210. Complete form WC-01.
- ☐ No, the heat input rate is below 3 million Btu/hr. Go to question 6d.

**6d) Is the waste combustor used as a metal recover incinerator?**

"Metals recovery incinerator" means a furnace or incinerator used primarily to recover precious and non-precious metals by burning the combustible fraction from waste. An aluminum sweat furnace is not a metals recovery incinerator.

- ☐ Yes. The waste combustor is subject to the standards of performance applicable to waste combustors. There are also additional permit application requirements for this unit, as described in Minn. R. 7007.0501, or 7011.1210. Complete form WC-01.
- ☐ No. Go to question 6e).

- 6e) Is the waste combustor located at a hospital?
- ☐ Yes. The waste combustor is subject to the standards of performance applicable to Class IV waste combustors. There are also additional permit application requirements for this unit, as described in Minn. R. 7007.0501, or 7011.1210. Complete form WC-02 if the waste combustor will comply with all of the design, operating, and standards of performance in parts 7011.1201 to 7011.1290. Otherwise, an air emissions permit must be issued, and you must complete for WC-01. **[Please Note:** There are federal Standards of Performance that must also be met for new sources (see Form CH-05), and the state will be adopting more stringent standards for existing incinerators.]
- ☐ No, the waste combustor is not located at a hospital. The operation of this waste combustor was banned after January 30, 1996. Your compliance plan must contain specific steps to cease operation of this waste combustor.

**Table 3: Minnesota Standards of Performance for Stationary Sources\***

Facility or Equipment Type	Associated Minnesota Rule
Direct Heating Equipment	7011.0600 through 7011.0625
Concrete Manufacturing Plants	7011.0850 through 7011.0860
Stage One Vapor Recovery	7011.0865 through 7011.0870
Hot Mix Asphalt Plants	7011.0900 through 7011.0925
Bulk Agricultural Commodity Facilities (Grain Elevators)	7011.1000 through 7011.1015
Coal Handling Facilities	7011.1100 through 7011.1140
Incinerators (waste combustors)	7011.1201 through 7011.1285
Petroleum Refineries	7011.1400 through 7011.1430
Liquid Petroleum and Volatile Organic Compounds (VOCs) Storage Vessels	7011.1500 through 7011.1515
Sulfuric Acid Plants	7011.1600 through 7011.1630
Nitric Acid Plants	7011.1700 through 7011.1725
Brass and Bronze Plants	7011.1900 through 7011.1915
Iron and Steel Plants	7011.2000 through 7011.2015
Inorganic Fibrous Materials	7011.2100 through 7011.2105
Stationary Internal Combustion Engine (Generators)	7011.2300
Municipal Solid Waste Landfills	7011.3500 through 7011.3510
Asbestos	7011.9921 through 7011.9927

\* This table does not include Minnesota Rules which incorporate federal New Source Performance Standards (NSPS) or National Emission standards for Hazardous Air Pollutant Sources (NESHAPS) by reference.

**Table 4: Instructions for determining your particulate limit**

Minnesota has a State rule for the concentration of particulate matter that may be in your exhaust stream. The unit of the standard is grains per dry standard cubic foot. You need to convert your actual exhaust flow to dry standard cubic feet per minute to find the emission limit from the rule.

Sources subject to this rule are required to meet the emission limits established at all times. These limits will vary depending on operating conditions. To determine compliance at any point in time (i.e. for a stack test), follow the steps below:

1. Determine the amount of dry material (subtract any water or moisture content) in pounds per hour that is processed by your equipment.
2. Use Table 4.1 to determine your allowed emission rate based on process weight rate. If your process weight rate falls between two values on the table, interpolate or extrapolate using the equation:

$$E = 3.59 \times \left( \frac{P}{2000} \right)^{0.62} \quad \text{for} \quad P \leq 60,000 \text{ lbs/hour; and:}$$

$$E = 17.31 \times \left( \frac{P}{2000} \right)^{0.16} \quad \text{for} \quad P > 60,000 \text{ lbs/hour}$$

where:

E = emission rate in lbs/hour; and  
P = process weight rate in lbs/hour

3. If your process equipment is vented to the atmosphere, determine the airflow through your stack. Correct to 68 F and 14.7 psi, and correct to remove any moisture in the gas stream to obtain the air flow in dry standard cubic feet per minute (dscfm).
4. Use Table 4.2 to determine your allowed concentration in grains per dry standard cubic foot (gr/dscf). Interpolate using the equation:

$$c = 1.7627 \times V^{-0.3241}$$

where:

c = concentration in gr/dscf,  
V = gas volume in dscfm

5. Determine which of the two emission rates calculated above is *less stringent*. To convert a concentration (calculated in step 4) to an emission rate (calculated in step 2), use the following equation:

$$E = c \times V \times \left( \frac{60}{7000} \right)$$

where:

E = emission rate in lbs/hour;  
c = concentration in gr/dscf,  
V = gas volume in dscfm

**Table 4.1**

Process Rate (lbs/hour)	Emission Rate (lbs/hour)
100	0.55
500	1.53
1,000	2.25
5,000	6.34
10,000	9.73
20,000	14.99
60,000	29.60
80,000	31.19
120,000	33.28
160,000	34.85
200,000	36.11
400,000	40.35
1,000,000	46.72

**Table 4.2**

Source Gas Volume (dscfm)	Concentration (gr/dscf)
7,000 or less	0.100
8,000	0.096
9,000	0.092
10,000	0.089
20,000	0.071
30,000	0.062
40,000	0.057
50,000	0.053
60,000	0.050
80,000	0.045
100,000	0.042
120,000	0.040
140,000	0.038
160,000	0.036
180,000	0.035
200,000	0.034
300,000	0.030
400,000	0.027
500,000	0.025
600,000	0.024
800,000	0.021
1,000,000 or more	0.020

Regardless of the allowable emission rates calculated from Tables 4.1 and 4.2, no process equipment is allowed to emit more than 0.30 grains per standard cubic foot of exhaust gas.



- 1) AQ Facility ID No.: 11100077
- 2) Facility Name: Otter Tail Ag Enterprises, LLC-
- 3) Flow Diagram:

**Please see Appendix B**



AIR QUALITY  
520 LAFAYETTE ROAD  
ST. PAUL, MN 55155-4194

PERMIT APPLICATION FORM **GI-03**  
**FACILITY AND STACK/VENT DIAGRAM**  
2/16/05

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1) AQ Facility ID No.: 11100077

2) Facility Name: Otter Tail Ag Enterprises, LLC

3) Facility and Stack/Vent Diagram:

**Please see Appendix C**



# Minnesota Pollution Control Agency

AIR QUALITY  
520 LAFAYETTE ROAD  
ST. PAUL, MN 55155-4194

PERMIT APPLICATION FORM **GI-04**  
**STACK/VENT INFORMATION**  
7/25/05

1) AQ Facility ID No.: 11100077 2) Facility Name: Otter Tail Ag Enterprises, LLC

3a) SV ID No.	3b) Operator's Description	3c) Height of Opening From Ground (ft.)	3d) Inside Diameter in ft. (left column only) or Length x Width in ft. (both columns)		3e) Design Flow Rate at Exit (acfm)	3f) Exit Gas Temperature (° F)	3g) Rate/Temp Information Source	3h) Discharge Direction
001	Grain Receiving	96.25	3.67		37,000	ambient	E	U
008	Hammermilling	40	3		23,800	ambient	E	U
011	DDGS Loadout	33	1.4		4,800	ambeint	E	U
012	Cooling Tower #1	36.7	25		676,072	ambient	E	U
013	Cooling Tower #2	36.7	25		676,072	ambient	E	U
014	Cooling Tower #3	36.7	25		676,072	ambient	E	U



# Minnesota Pollution Control Agency

AIR QUALITY  
520 LAFAYETTE ROAD  
ST. PAUL, MN 55155-4194

PERMIT APPLICATION FORM **GI-05A**  
**POLLUTION CONTROL**  
**EQUIPMENT INFORMATION**  
07/25/05

1) AQ Facility ID No.: 1100077 2) Facility Name: Otter Tail Ag Enterprises, LLC

3a) Control Equip ID No.	3b) CE Type Code	3c) Description	3d) Manufacturer	3e) Model No.	3f) Pollutants Controlled	3g) Capture Efficiency	3h) Destruct/ Collect Efficiency	3i) Afterburner Combustion Parameters
002	018	Fabric Filter (T<180 F)	TBD	TBD	PM/PM10	——	99	N/A
003	018	Fabric Filter (T<180 F)	TBD	TBD	PM/PM10	——	99	N/A
004	018	Fabric Filter (T<180 F)	TBD	TBD	PM/PM10	——	99	N/A
005	018	Fabric Filter (T<180 F)	TBD	TBD	PM/PM10	——	99	N/A
006	018	Fabric Filter (T<180 F)	TBD	TBD	PM/PM10	——	99	N/A
007	018	Fabric Filter (T<180 F)	TBD	TBD	PM/PM10	——	99	N/A
009	018	Fabric Filter (T<180 F)	TBD	TBD	PM/PM10	——	99	N/A
010	018	Fabric Filter (T<180 F)	TBD	TBD	PM/PM10	——	99	N/A



# Minnesota Pollution Control Agency

AIR QUALITY  
520 LAFAYETTE ROAD  
ST. PAUL, MN 55155-4194

PERMIT APPLICATION FORM **GI-05B**  
**EMISSION UNIT INFORMATION,**  
**PART 1**  
07/25/05

1) AQ Facility ID No.: 11100077 2) Facility Name: Otter Tail Ag Enterprises, LLC

3a) Emis Unit ID No.	3b) SV ID No(s).	3c) Relation Type	3d) Control Equip ID No.	3e) Emission Unit Operator's Description	3f) Manufacturer	3g) Model No.
020	015	M-	015	Cooling Tower Cell #4	TBD	TBD
021	016	M-	016	Cooling Tower Cell #5	TBD	TBD
022	017	M-	017	Cooling Tower Cell #6	TBD	TBD
023	018	M-	018	Cooling Tower Cell #7	TBD	TBD
024	019	M	019	Cooling Tower Cell #8	TBD	TBD





MINNESOTA POLLUTION CONTROL AGENCY  
AIR QUALITY  
520 LAFAYETTE ROAD  
ST. PAUL, MN 55155-4194

PERMIT APPLICATION FORM **GI-05B**  
**EMISSION UNIT INFORMATION,**  
**PART 2**

1) AQ Facility ID No.: 11100077-001 2) Facility Name: Otter Tail Ag Enterprises, LLC

3a) Emis Unit ID No.	3h) Maximum Design Capacity	3i) Maximum Design Capacity Units	3j) Maximum Fuel Input (MMBTU)	3k) Commence Construction Date (MM/DD/YY)	3l) Initial Startup Date (MM/DD/YY)	3m) Firing Method (coal- burning units only)	3n) % Fuel for Space Heat (boilers only)	3o) Bottle-neck? F = facility G = group of sources	3p) SIC Code
N/A									



**Minnesota Pollution  
Control Agency**

520 LAFAYETTE ROAD  
ST. PAUL, MN 55155-4194

PERMIT APPLICATION FORM **GI-07**  
**FACILITY EMISSIONS SUMMARY**  
October 25, 2006

1) AQ Facility ID No.: 11100077 2) Facility Name: Otter Tail Ag Enterprises, LLC

3a)  Emission Source Type	3b)  Emission Source ID No.	3c) CAS#:				CAS#:				CAS#:			
						Pollutant Name:				Pollutant Name:			
		3e) Potential			3f) Actual	Potential			Actual	Potential			Actual
		Lbs per Hr	Unc tpy	Lim tpy	Tons per yr	Lbs per Hr	Unc tpy	Lim tpy	Tons per yr	Lbs per Hr	Unc tpy	Lim tpy	Tons per yr
			See Attached Emission Calculations in Appendix A of this Application.										

4)  Total Facility	Potential			Actual	Potential			Actual	Potential			Actual
		Unc	Lim	Yr		Unc	Lim	Yr		Unc	Lim	Yr



- Use this form to calculate actual emissions for processes or units that cannot be accounted for in the process/unit specific emissions calculations forms.
- Duplicate this form as necessary to identify all emission units, or attach sheets with equivalent information..

- 1) AQ Facility ID No.: 11100077-001
- 2) Facility Name: Otter Tail Ag Enterprises, LLC
- 3) Emission Unit Identification Number: EU001-EU008
- 4) Stack/Vent Designation Number: SV001
- 5) Pollution Control Equipment Identification Number(s): CE001
- 6) Process Type: ☒ Batch Process ☐ Continuous Process
- 7) Operating Capacity: 24.3 Units: MMBu/yr
- 8) Source of Emission Factors used in table below: \_\_\_\_\_
- 9) Calculations Summary:

9a) Pollutant	9b) Emission Factor (lbs/Unit)	9c) Emission Rate (lbs/hr)	9d) Maximum Uncontrolled Emissions (tons/yr)	9e) Actual Uncontrolled Emissions (tons/yr)	9f) Pollution Control Efficiency (%)	9g) Maximum Controlled Emissions (tons/yr)	9h) Actual Controlled Emissions (tons/yr)	9i) Limited Controlled Emissions (tons/yr)
PM	See	Append	A					
PM <sub>10</sub>								
SO <sub>x</sub>								
NO <sub>x</sub>								
VOC								
CO								
Lead								

10) Check all of the following that are appropriate:

- ☐ This process/unit combusts fuel. Include fuel combustion emissions on Form EC-02 (Boilers), EC-03 (Internal Combustion Engines), or EC-08 (Ovens, Dryers, Furnaces), as appropriate.
- ☐ This process/unit uses clean-up solvents in addition to the process described by the emissions above. Include clean-up solvent emissions on Form EC-12.
- ☐ This process/unit emits Hazardous Air Pollutants (HAPs). Include HAP emissions on Form EC-13A (VOC HAPs), EC-13B (Particulate HAPs), or EC-13C (Combustion HAPs), as appropriate.

11) Operating Limitations, if applicable:

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- Use this form to calculate actual emissions for processes or units that cannot be accounted for in the process/unit specific emissions calculations forms.
- Duplicate this form as necessary to identify all emission units, or attach sheets with equivalent information..

- 1) AQ Facility ID No.: 11100077-001
- 2) Facility Name: Otter Tail Ag Enterprises, LLC
- 3) Emission Unit Identification Number: EU009-EU012 and EU055
- 4) Stack/Vent Designation Number: SV008
- 5) Pollution Control Equipment Identification Number(s): CE008
- 6) Process Type: ☐ Batch Process ☒ Continuous Process
- 7) Operating Capacity: 24.3 Units: MMBu/yr
- 8) Source of Emission Factors used in table below: \_\_\_\_\_
- 9) Calculations Summary:

9a) Pollutant	9b) Emission Factor (lbs/Unit)	9c) Emission Rate (lbs/hr)	9d) Maximum Uncontrolled Emissions (tons/yr)	9e) Actual Uncontrolled Emissions (tons/yr)	9f) Pollution Control Efficiency (%)	9g) Maximum Controlled Emissions (tons/yr)	9h) Actual Controlled Emissions (tons/yr)	9i) Limited Controlled Emissions (tons/yr)
PM	See	Append	A					
PM <sub>10</sub>								
SO <sub>x</sub>								
NO <sub>x</sub>								
VOC								
CO								
Lead								

- 10) Check all of the following that are appropriate:

- ☐ This process/unit combusts fuel. Include fuel combustion emissions on Form EC-02 (Boilers), EC-03 (Internal Combustion Engines), or EC-08 (Ovens, Dryers, Furnaces), as appropriate.
- ☐ This process/unit uses clean-up solvents in addition to the process described by the emissions above. Include clean-up solvent emissions on Form EC-12.
- ☐ This process/unit emits Hazardous Air Pollutants (HAPs). Include HAP emissions on Form EC-13A (VOC HAPs), EC-13B (Particulate HAPs), or EC-13C (Combustion HAPs), as appropriate.

- 11) Operating Limitations, if applicable:

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- Use this form to calculate actual emissions for processes or units that cannot be accounted for in the process/unit specific emissions calculations forms.
- Duplicate this form as necessary to identify all emission units, or attach sheets with equivalent information..

- 1) AQ Facility ID No.: 11100077-001
- 2) Facility Name: Otter Tail Ag Enterprises, LLC
- 3) Emission Unit Identification Number: EU013-EU016
- 4) Stack/Vent Designation Number: SV011
- 5) Pollution Control Equipment Identification Number(s): CE008
- 6) Process Type: ☐ Batch Process ☒ Continuous Process
- 7) Operating Capacity: 212,220 Units: tons/yr
- 8) Source of Emission Factors used in table below: \_\_\_\_\_
- 9) Calculations Summary:

9a) Pollutant	9b) Emission Factor (lbs/Unit)	9c) Emission Rate (lbs/hr)	9d) Maximum Uncontrolled Emissions (tons/yr)	9e) Actual Uncontrolled Emissions (tons/yr)	9f) Pollution Control Efficiency (%)	9g) Maximum Controlled Emissions (tons/yr)	9h) Actual Controlled Emissions (tons/yr)	9i) Limited Controlled Emissions (tons/yr)
PM	See	Append	A					
PM <sub>10</sub>								
SO <sub>x</sub>								
NO <sub>x</sub>								
VOC								
CO								
Lead								

- 10) Check all of the following that are appropriate:

- ☐ This process/unit combusts fuel. Include fuel combustion emissions on Form EC-02 (Boilers), EC-03 (Internal Combustion Engines), or EC-08 (Ovens, Dryers, Furnaces), as appropriate.
- ☐ This process/unit uses clean-up solvents in addition to the process described by the emissions above. Include clean-up solvent emissions on Form EC-12.
- ☐ This process/unit emits Hazardous Air Pollutants (HAPs). Include HAP emissions on Form EC-13A (VOC HAPs), EC-13B (Particulate HAPs), or EC-13C (Combustion HAPs), as appropriate.

- 11) Operating Limitations, if applicable:

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1) AQ Facility ID No.: 11100077 2) Facility Name: Otter Tail Ag Enterprises, LLC

3) Entire Facility  
Individual Items  
Grouped Items:  
Group ID Number \_\_\_\_\_  
Briefly describe the function of this group:  
**Grain Receiving**

4)															
Stack/Vent ID Nos.	001														
Emission Unit ID Nos.	001-008														
Tank ID Nos.															
Fugitive Source ID Nos.															
Control Equipment ID Nos.															

<b>5a)</b>  Citation	<b>5b)</b>  Requirement	<b>5c)</b>  Requirement Type  (For MPCA Use)
<b>40 CFR Section 52.21 and Minn. R. 7007.3000;</b>  <b>40 CFR Section 52.21 and Minn. R. 7007.3000</b> <b>40 CFR Section 70.2 and Minn. R. 7007-0200</b> <b>Minn. R. 7011.1005, subp.3(D)</b>  <b>Minn. R. 7017.2020, subp. 1</b>  <b>Minn. R. 7017.2020, subp. 1</b>	<b>Total Particulate Matter: less than or equal to 3.17 lbs/hour</b>  <b>Particulate Matter &lt; 10 micron: less than or equal to 3.17 lbs/hour</b>  <b>Opacity: less than or equal to 10 percent opacity</b>  <b>Initial Performance Test: due 180 days after Startup to measure Total Particulate Matter emissions</b>  <b>Initial Performance Test: due 180 days after Startup to measure Particulate Matter &lt; 10 microns emissions</b>	



1) AQ Facility ID No.: 11100077 2) Facility Name: Otter Tail Ag Enterprises, LLC

3) Entire Facility  
Individual Items  
Grouped Items:  
Group ID Number \_\_\_\_\_  
Briefly describe the function of this group:  
Grain Hammermilling

4)															
Stack/Vent ID Nos.	008														
Emission Unit ID Nos.	009-012	055													
Tank ID Nos.															
Fugitive Source ID Nos.															
Control Equipment ID Nos.															



5a)  Citation	5b)  Requirement	5c)  Requirement Type  (For MPCA Use)
40 CFR Section 52.21 and Minn. R. 7007.3000;  40 CFR Section 52.21 and Minn. R. 7007.3000 40 CFR Section 70.2 and Minn. R. 7007-0200 Minn. R. 7011.1005, subp.3(D)  Minn. R. 7017.2020, subp. 1  Minn. R. 7017.2020, subp. 1	Total Particulate Matter: less than or equal to 2.04 lbs/hour  Particulate Matter < 10 micron: less than or equal to 2.04 lbs/hour  Opacity: less than or equal to 10 percent opacity  Initial Performance Test: due 180 days after Startup to measure Total Particulate Matter emissions  Initial Performance Test: due 180 days after Startup to measure Particulate Matter < 10 microns emissions	



1) AQ Facility ID No.: 11100077 2) Facility Name: Otter Tail Ag Enterprises, LLC

3) Entire Facility  
Individual Items  
Grouped Items:  
Group ID Number \_\_\_\_\_  
Briefly describe the function of this group:  
**DDGS Handling and Loadout**

4)															
Stack/Vent ID Nos.	011														
Emission Unit ID Nos.	013-016														
Tank ID Nos.															
Fugitive Source ID Nos.															
Control Equipment ID Nos.															

<b>5a)</b>  Citation	<b>5b)</b>  Requirement	<b>5c)</b>  Requirement Type  (For MPCA Use)
<b>40 CFR Section 52.21 and Minn. R. 7007.3000;</b>  <b>40 CFR Section 52.21 and Minn. R. 7007.3000</b> <b>40 CFR Section 70.2 and Minn. R. 7007-0200</b> <b>Minn. R. 7011.1005, subp.3(D)</b>  <b>Minn. R. 7017.2020, subp. 1</b>  <b>Minn. R. 7017.2020, subp. 1</b>	<b>Total Particulate Matter: less than or equal to 0.41 lbs/hour</b>  <b>Particulate Matter &lt; 10 micron: less than or equal to 0.41 lbs/hour</b>  <b>Opacity: less than or equal to 10 percent opacity</b>  <b>Initial Performance Test: due 180 days after Startup to measure Total Particulate Matter emissions</b>  <b>Initial Performance Test: due 180 days after Startup to measure Particulate Matter &lt; 10 microns emissions</b>	

## **APPENDIX E**

Edited Permit

**AIR EMISSION PERMIT NO. 11100077- 001**

**IS ISSUED TO**

Otter Tail Ag Enterprises LLC

**OTTER TAIL AG ENTERPRISES LLC**

Western Half of Section 20

Township 133N

Fergus Falls, Otter Tail County, MN 56537

The emission units, control equipment and emission stacks at the stationary source authorized in this permit are as described in the following permit application(s):

Permit Type  
Total Facility Operating Permit

Application Date  
April 24, 2006

This permit authorizes the Permittee to operate and construct the stationary source at the address listed above unless otherwise noted in Table A. The Permittee must comply with all the conditions of the permit. Any changes or modifications to the stationary source must be performed in compliance with Minn. R. 7007.1150 to 7007.1500. Terms used in the permit are as defined in the state air pollution control rules unless the term is explicitly defined in the permit.

**Permit Type:** State; Limits to Avoid Pt 70/Limits to Avoid NSR

**Issue Date:** October 25, 2006

**Expiration:** Non-Expiring  
All Title I Conditions do not expire.

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Richard J. Sandberg, Manager  
Air Quality Permits Section  
Industrial Division

for Bradley Moore  
Acting Commissioner  
Minnesota Pollution Control Agency

## **TABLE OF CONTENTS**

**Notice to the Permittee**

**Permit Shield**

**Facility Description**

**Table A: Limits and Other Requirements**

**Table B: Submittals**

**Table C: Compliance Schedule**

**Appendices: Attached and Referenced in Table A**

**NOTICE TO THE PERMITTEE:**

Your stationary source may be subject to the requirements of the Minnesota Pollution Control Agency's (MPCA) solid waste, hazardous waste, and water quality programs. If you wish to obtain information on these programs, including information on obtaining any required permits, please contact the MPCA general information number at:

Metro Area	(651) 296-6300
Outside Metro Area	1-800-657-3864
TTY	(651) 282-5332

The rules governing these programs are contained in Minn. R. chs. 7000-7105. Written questions may be sent to: Minnesota Pollution Control Agency, 520 Lafayette Road North, St. Paul, Minnesota 55155-4194.

Questions about this air emission permit or about air quality requirements can also be directed to the telephone numbers and address listed above.

**PERMIT SHIELD:**

Subject to the limitations in Minn. R. 7007.1800, compliance with the conditions of this permit shall be deemed compliance with the specific provision of the applicable requirement identified in the permit as the basis of each condition. Subject to the limitations of Minn. R. 7007.1800 and 7017.0100, subp. 2, notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements.

## **FACILITY DESCRIPTION:**

Otter Tail Ag Enterprises LLC is a fuel-grade ethanol production facility to be located near Fergus Falls, Minnesota, in the western half of Section 20, Township 133N. The facility has a design capacity of 65 million gallons of undenatured ethanol. The plant will also produce Distillers Dried Grains and Solubles (DDGS) for animal feed as a by-product of the ethanol production process. Emission sources at the facility include fermentation, distillation, DDGS handling and drying, combustion sources, storage tanks, production loadout, and fugitive sources such as grain handling and dust from haul roads.

The primary emissions are Volatile Organic Compounds (VOC), Particulate Matter (PM) Particulate Matter less than 10 um in size (PM<sub>10</sub>), Nitrogen oxides (NO<sub>x</sub>), and Carbon Monoxide (CO). VOCs are emitted by fermentation, distillation, DDGS drying, wetcake production and storage, ethanol loading, and VOC liquid storage and piping. PM/PM<sub>10</sub> is emitted by DDGS handling and drying, corn receiving and handling, and vehicle traffic. NO<sub>x</sub> and CO are emitted by combustion sources.

The primary pieces of control equipment are fabric filters, wet scrubbers, multiclones and a thermal oxidizer. The scrubber controls emissions from the fermentation and distillation units including the beer well, evaporators and centrifuges; and the thermal oxidizer controls emissions from the Dryers, distillation process and DDGS coolers. A flare is use to control emissions from truck and rail ethanol loadout. Baghouses control PM/PM<sub>10</sub> from the corn and DDGS handling and storage systems and the Truck/Rail Loadout area. There are internal floating roof tanks for ethanol, denaturant, and denatured ethanol. Emissions from process valves and piping will be controlled through an inspection and maintenance program.



**TABLE A: LIMITS AND OTHER REQUIREMENTS**

A-1

10/25/06

Facility Name: Otter Tail Ag Enterprises LLC

Permit Number: 11100077 - 001

**Table A contains limits and other requirements with which your facility must comply. The limits are located in the first column of the table (What To do). The limits can be emission limits or operational limits. This column also contains the actions that you must take and the records you must keep to show that you are complying with the limits. The second column of Table A (Why to do it) lists the regulatory basis for these limits. Appendices included as conditions of your permit are listed in Table A under total facility requirements.**

**Subject Item:****Total Facility**

<b>What to do</b>	<b>Why to do it</b>
<b>SOURCE-SPECIFIC REQUIREMENTS</b>	hdr
Production: less than or equal to 65 million gallons/year using 12-month Rolling Sum of fuel ethanol (pure ethanol, prior to addition of denaturant,) to be calculated by the 15th day of each month for the previous 12-month period.	Title 1 Condition: To avoid major source classification under 40 CFR Section 52.21 and Minn. R. 7007.3000. To avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200
Recordkeeping: By the 15th day of each month, record the gallons of ethanol produced during the previous month and the gallons of ethanol produced during the previous 12 months, (12-month rolling sum.)	Title 1 Condition: To avoid major source classification under 40 CFR Section 52.21 and Minn. R. 7007.0300. To avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200
HAP-Single: less than or equal to 9.0 tons/year using 12-month Rolling Sum . Compliance with VOC limits and control listed in subject items SV 026, SV 027, & SV 028 ensures compliance with this limit unless performance testing results in higher HAP emissions than projected. (See SV 026 for mitigation measures.)	Title I Condition: To avoid major source classification under 40 CFR Section 63.2; To avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200
HAPs - Total: less than or equal to 24.0 tons/year using 12-month Rolling Sum . Compliance with VOC limits and control listed in subject items SV 026, SV 027, & SV 030 ensures compliance with this limit unless performance testing results in higher HAP emissions than projected.	Title I Condition: To avoid major source classification under 40 CFR Section 63.2; To avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200
<b>OPERATIONAL REQUIREMENTS</b>	hdr
Circumvention: Do not install or use a device or means that conceals or dilutes emissions, which would otherwise violate a federal or state air pollution control rule, without reducing the total amount of pollutant emitted.	Minn. R. 7011.0020
Air Pollution Control Equipment: Operate all pollution control equipment whenever the corresponding process equipment and emission units are operated, unless otherwise noted in Table A.	Minn. R. 7007.0800, subp. 2; Minn. R. 7007.0800, subp. 16(J)
Operation and Maintenance Plan: Retain at the stationary source an operation and maintenance plan for all air pollution control equipment. At a minimum, the O & M plan shall identify all air pollution control equipment and control practices and shall include a preventative maintenance program for the equipment and practices, a description of (the minimum but not necessarily the only) corrective actions to be taken to restore the equipment and practices to proper operation to meet applicable permit conditions, a description of the employee training program for proper operation and maintenance of the control equipment and practices, and the records kept to demonstrate plan implementation.	Minn. R. 7007.0800, subp. 14 and Minn. R. 7007.0800, subp. 16(J)
Operation Changes: In any shutdown, breakdown, or deviation the Permittee shall immediately take all practical steps to modify operations to reduce the emission of any regulated air pollutant. The Commissioner may require feasible and practical modifications in the operation to reduce emissions of air pollutants. No emissions units that have an unreasonable shutdown or breakdown frequency of process or control equipment shall be permitted to operate.	Minn. R. 7019.1000, subp. 4
Fugitive Emissions: Do not cause or permit the handling, use, transporting, or storage of any material in a manner which may allow avoidable amounts of particulate matter to become airborne. Comply with all other requirements listed in Minn. R. 7011.0150.	Minn. R. 7011.0150
Noise: The Permittee shall comply with the noise standards set forth in Minn. R. 7030.0010 to 7030.0080 at all times during the operation of any emission units. This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act.	Minn. R. 7030.0010 - 7030.0080
Odor: The Permittee shall comply with the plan for odor management, submitted by the Permittee and attached in Appendix IV of this permit.	Minn. R. 7007.0800, subp. 2
Inspections: The Permittee shall comply with the inspection procedures and requirements as found in Minn. R. 7007.0800, subp. 9(A).	Minn. R. 7007.0800, subp. 9(A)
The Permittee shall comply with the General Conditions listed in Minn. R. 7007.0800, subp. 16.	Minn. R. 7007.0800, subp. 16
<b>PERFORMANCE TESTING</b>	hdr

GPOT-0004439

**TABLE A: LIMITS AND OTHER REQUIREMENTS**
**A-2**

10/25/06

Facility Name: Otter Tail Ag Enterprises LLC

Permit Number: 11100077 - 001

If the Permittee chooses to install propane back-up, the Permittee shall conduct a compliance test for NOx emissions while firing Propane and determine either an annual hourly limit or a capacity factor based on the test data to limit annual NOx emissions from the combustion units to the limits in this permit. The annual hourly limit or capacity factor will become an enforceable limit in this permit.	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as major source under 40 CFR Section 70.2 and Minn. R. 7007.0200
Performance Testing: Conduct all performance tests in accordance with Minn. R. ch. 7017 unless otherwise noted in Tables A, B, and/or C.	Minn. R. ch. 7017
Performance Test Notifications and Submittals:  Performance Tests are due as outlined in Tables A and B of the permit. See Table B for additional testing requirements.  Performance Test Notification (written): due 30 days before each Performance Test Performance Test Plan: due 30 days before each Performance Test Performance Test Pre-test Meeting: due 7 days before each Performance Test Performance Test Report: due 45 days after each Performance Test Performance Test Report - Microfiche Copy: due 105 days after each Performance Test  The Notification, Test Plan, and Test Report may be submitted in alternative format as allowed by Minn. R. 7017.2018.	Minn. Rs. 7017.2030, subp. 1-4, 7017.2018 and Minn. R. 7017.2035, subp. 1-2
Limits set as a result of a performance test (conducted before or after permit issuance) apply until superseded as stated in the MPCA's Notice of Compliance letter granting preliminary approval. Preliminary approval is based on formal review of a subsequent performance test on the same unit as specified by Minn. R. 7017.2025, subp. 3. The limit is final upon issuance of a permit amendment incorporating the change.	Minn. R. 7017.2025
MONITORING REQUIREMENTS	hdr
Monitoring Equipment Calibration: Annually calibrate all required monitoring equipment (any requirements applying to continuous emission monitors are listed separately in this permit).	Minn. R. 7007.0800, subp. 4(D)
Operation of Monitoring Equipment: Unless otherwise noted in Tables A, B, and/or C, monitoring a process or control equipment connected to that process is not necessary during periods when the process is shutdown, or during checks of the monitoring systems, such as calibration checks and zero and span adjustments. If monitoring records are required, they should reflect any such periods of process shutdown or checks of the monitoring system.	Minn. R. 7007.0800, subp. 4(D)
MODELING REQUIREMENTS	hdr
The Permittee shall comply with National Primary and Secondary Ambient Air Quality Standards, 40 CFR pt. 50, and the Minnesota Ambient Air Quality Standards, Minn. R. 7009.0010 to 7009.0080. Compliance shall be demonstrated upon written request by the MPCA.	40 CFR pt. 50; Minn. Stat. Section 116.07, subds. 4a & 9; Minn. R. 7007.0100, subps. 7A, 7L & 7M; Minn. R. 7007.0800, subps. 1, 2 & 4; Minn. R. 7009.0010-7009.0080.
<del>Parameters Used in Modeling:  The parameters used in the modeling performed for an Environmental Assessment Worksheet under Minn. R. ch. 4410 and for determining emission and/or operational limits, if applicable for this facility are listed in Appendix III of this permit. If the Permittee intends to change any of these parameters, the Permittee must submit the revised parameters to the Commissioner and receive written approval before making any changes. The revised parameter information submittal must include, but is not limited to: the locations, heights and diameters of the stacks; locations and dimensions of nearby buildings; velocity and temperatures of the gases emitted; and the emission rates. The plume dispersion characteristics due to the parameter revisions must equal or exceed the dispersion characteristics modeled for this permit, and the Permittee shall demonstrate this in the proposal.</del>	<del>Minn. R. 7009.0020; Minn. R. 7007.0800, subp. 2</del>
<del>Parameters Used in Modeling (continued):  If the information does not demonstrate equivalent or better dispersion characteristics, or if a conclusion cannot readily be made about the dispersion, the Permittee must remodel.</del>	<del>CONTINUED: Minn. R. 7009.0020; Minn. R. 7007.0800, subp. 2</del>
<del>Parameters Used in Modeling (continued):  For changes that do not involve an increase in an emission rate and that do not require a permit amendment, the proposal must be submitted as soon as practicable, but no less than 60 days before making the change to any parameter.</del>	<del>CONTINUED: Minn. R. 7009.0020; Minn. R. 7007.0800, subp. 2</del>

GPOT-0004440

**TABLE A: LIMITS AND OTHER REQUIREMENTS**
**A-3**

10/25/06

Facility Name: Otter Tail Ag Enterprises LLC

Permit Number: 11100077 - 001

<p><del>Parameters Used in Modeling (continued):</del></p> <p><del>For changes involving increases in emission rates and that require a minor permit amendment, the proposal must be submitted as soon as practicable, but no less than 60 days before making the change to any parameter.</del></p> <p><del>For changes involving increases in emission rates and that require a permit amendment other than a minor amendment, the proposal must be submitted prior to or with the permit amendment application.</del></p> <p><del>This is a state only requirement and is not enforceable by the EPA Administrator and citizens under the Clean Air Act.</del></p>	<p><del>CONTINUED: Minn. R. 7009.0020; Minn. R. 7007.0800, subp. 2</del></p>
<p><del>The Permittee</del> shall install fencing around the Facility. The fencing shall be fully installed prior to receipt of corn at the Facility. In areas where fencing is not permissible by set-backs, right-of-ways, safety concerns, or clearances, the Permittee will commit to installation of signage and patrolling to sufficiently restrict public access to the property outlined as fenced in the dispersion modeling.</p>	<p>Minn. R. 7009.0020; Minn. R. 7007.0800, subp. 2</p>
<p>The Permittee shall submit a Diesel Emission Idling Prevention Plan within 180 days after Permit Issuance. The plan must be reviewed and approved by the MPCA.</p>	<p>Minn. R. 7009.0020; Minn. R. 7007.0800, subp. 2</p>
<p>RECORDKEEPING</p>	<p>hdr</p>
<p>Recordkeeping: Retain all records at the stationary source for a period of five (5) years from the date of monitoring, sample, measurement, or report. Records which must be retained at this location include all calibration and maintenance records, all original recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Records must conform to the requirements listed in Minn. R. 7007.0800, subp. 5(A).</p>	<p>Minn. R. 7007.0800, subp. 5(C)</p>
<p>Recordkeeping: Maintain records describing any insignificant modifications (as required by Minn. R. 7007.1250, subp. 3) or changes contravening permit terms (as required by Minn. R. 7007.1350, subp. 2), including records of the emissions resulting from those changes.</p>	<p>Minn. R. 7007.0800, subp. 5(B)</p>
<p>REPORTING/SUBMITTALS</p>	<p>hdr</p>
<p>Shutdown Notifications: Notify the Commissioner at least 24 hours in advance of a planned shutdown of any control equipment or process equipment if the shutdown would cause any increase in the emissions of any regulated air pollutant. If the owner or operator does not have advance knowledge of the shutdown, notification shall be made to the Commissioner as soon as possible after the shutdown. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 3.</p> <p>At the time of notification, the owner or operator shall inform the Commissioner of the cause of the shutdown and the estimated duration. The owner or operator shall notify the Commissioner when the shutdown is over.</p>	<p>Minn. R. 7019.1000, subp. 3</p>
<p>Breakdown Notifications: Notify the Commissioner within 24 hours of a breakdown of more than one hour duration of any control equipment or process equipment if the breakdown causes any increase in the emissions of any regulated air pollutant. The 24-hour time period starts when the breakdown was discovered or reasonably should have been discovered by the owner or operator. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 2.</p> <p>At the time of notification or as soon as possible thereafter, the owner or operator shall inform the Commissioner of the cause of the breakdown and the estimated duration. The owner or operator shall notify the Commissioner when the breakdown is over.</p>	<p>Minn. R. 7019.1000, subp. 2</p>
<p>Notification of Deviations Endangering Human Health or the Environment: As soon as possible after discovery, notify the Commissioner or the state duty officer, either orally or by facsimile, of any deviation from permit conditions which could endanger human health or the environment.</p>	<p>Minn. R. 7019.1000, subp. 1</p>
<p>Notification of Deviations Endangering Human Health or the Environment Report: Within 2 working days of discovery, notify the Commissioner in writing of any deviation from permit conditions which could endanger human health or the environment. Include the following information in this written description:</p> <ol style="list-style-type: none"> <li>1. the cause of the deviation;</li> <li>2. the exact dates of the period of the deviation, if the deviation has been corrected;</li> <li>3. whether or not the deviation has been corrected;</li> <li>4. the anticipated time by which the deviation is expected to be corrected, if not yet corrected; and</li> <li>5. steps taken or planned to reduce, eliminate, and prevent reoccurrence of the deviation.</li> </ol>	<p>Minn. R. 7019.1000, subp. 1</p>

**TABLE A: LIMITS AND OTHER REQUIREMENTS****A-4**

10/25/06

Facility Name: Otter Tail Ag Enterprises LLC

Permit Number: 11100077 - 001

Application for Permit Amendment: If a permit amendment is needed, submit an application in accordance with the requirements of Minn. R. 7007.1150 through Minn. R. 7007.1500. Submittal dates vary, depending on the type of amendment needed.	Minn. R. 7007.1150 through Minn. R. 7007.1500
Extension Requests: The Permittee may apply for an Administrative Amendment to extend a deadline in a permit by no more than 120 days, provided the proposed deadline extension meets the requirements of Minn. R. 7007.1400, subp. 1(H).	Minn. R. 7007.1400, subp. 1(H)
Emission Inventory Report: due on or before April 1 of each calendar year following permit issuance. To be submitted on a form approved by the Commissioner.	Minn. R. 7019.3000 through Minn. R. 7019.3100
Emission Fees: due 60 days after receipt of an MPCA bill.	Minn. R. 7002.0005 through Minn. R. 7002.0095
The Permittee must submit a Risk Management Plan (RMP) under 40 CFR pt. 68. Each owner or operator of a stationary source, at which a regulated substance is present above a threshold quantity in a process, shall design and implement an accidental release prevention program. An initial RMP must be submitted no later than the latest of the following dates: 1) June 21, 1999; 2) Three years after the date on which a regulated substance is first listed under 40 CFR Section 68.130; or 3) The date on which a regulated substance is first present above a threshold quantity in a process. A full update and resubmission of the RMP is required at least once every five years. The five-year anniversary date is reset whenever your facility fully updates and resubmits their RMP. Submit RMPs to the Risk Management Plan Reporting Center, P.O. Box 1515, Lanham-Seabrook, Maryland 20703-1515. RMP information may be obtained at <a href="http://www.epa.gov/swercepp">http://www.epa.gov/swercepp</a> or by calling 1-800-424-9346.	40 CFR pt. 68

**TABLE A: LIMITS AND OTHER REQUIREMENTS****A-5**

10/25/06

Facility Name: Otter Tail Ag Enterprises LLC

Permit Number: 11100077 - 001

**Subject Item: GP 001 Tanks subject to NSPS Subpart Kb****Associated Items:** CE 033 Other

CE 034 Other

CE 035 Other

CE 036 Other

CE 037 Other

SV 029 TK001 200 Proof EtOH 1

SV 030 TK002 200 Proof EtOH 2

SV 031 TK003 Denaturant Tank

SV 032 TK004 Denatured Ethanol Tank 1

SV 033 TK005 Denatured Ethanol Tank 2

TK 001 200 Proof Tank

TK 002 200 Proof Tank

TK 003 Denaturant Storage Tank

TK 004 Denatured Ethanol Tank 1

TK 005 Denatured Ethanol Tank 2

What to do	Why to do it
<b>POLLUTION CONTROL REQUIREMENTS</b>	hdr
The storage vessel shall be equipped with a fixed roof in combination with an internal floating roof meeting the requirements of 40 CFR Section 60.112b(a)(1).	40 CFR Section 60.112b(a); Minn. R. 7011.1520(C)
The seals on the internal floating roof shall be liquid mounted, consist of two continuous seals, or be of mechanical shoe design meeting the specifications of 40 CFR 60.112b (a)(1)	40 CFR Section 60.112b (a)(1); Minn. R. 7011.1520(C)
<b>MONITORING REQUIREMENTS</b>	hdr
Inspection - Prior to initial fill of tanks: Visually inspect the internal floating roof, the primary seal, and the secondary seal, prior to filling the storage vessel with Volatile Organic Liquid (VOL). If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric, or defects in the internal floating roof, or both, the owner or operator shall repair the items before filling the storage vessel.	40 CFR Section 60.113b(a)(1); Minn. R. 7011.1520(C)
Inspection - Annual: Visually inspect the internal floating roof, the primary seal, and the secondary seal through manholes and roof hatches on the fixed roof at least once every twelve (12) months after initial fill as required by 40 CFR Section 60.113b(a)(2). This requirement applies to vessels equipped with a liquid-mounted or mechanical shoe primary seal and is optional for vessels equipped with a double-seal system as specified in 40CFR Section 60.112b(a)(1)(ii)(B).  If a failure that is detected during inspection cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Administrator in the inspection report required in 60.115b. Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.	40 CFR Section 60.113b(a)(3)(ii) and/or 40 CFR Section 60.113b(a)(2); Minn. R. 7011.1520(C)
Inspection - Tank Empty and Degassed: Visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed, as required by 40 CFR Section 60.113b(a)(4). In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years or at intervals no greater than 5 years for vessels equipped with a double-seal system as specified in 40 CFR Section 60.112b(a)(1)(ii)(B) and opting out of annual visual inspection as specified in 40 CFR Section 116b(a)(2) and 40 CFR Section 60.113b(a)(3)(i).	40 CFR Section 60.113b(a)(3)(ii) and/or 40 CFR Section 60.113b(a)(4); Minn. R. 7011.1520(C)
<b>RECORDKEEPING REQUIREMENTS</b>	hdr
Recordkeeping: Maintain records showing the dimensions of the tank and an analysis showing the tank capacity. These records shall be maintained for the life of the source.	40 CFR Section 60.116b(b); Minn. R. 7011.1520(C)

GPOT-0004443

**TABLE A: LIMITS AND OTHER REQUIREMENTS****A-6**

10/25/06

Facility Name: Otter Tail Ag Enterprises LLC

Permit Number: 11100077 - 001

Keep a record of each inspection performed as required by 40 CFR Section 60.113b(a)(1), (a)(2), (a)(3), and (a)(4). Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).	40 CFR Section 60.115b(a)(2); Minn. R. 7011.1520(C)
Recordkeeping: Maintain records showing the volatile organic liquid (VOL) stored, the period of storage, and the maximum true vapor pressure of the VOL during the respective storage period, calculated as described in 40 CFR Section 116b(e).	40 CFR Section 60.116b(c); Minn. R. 7011.1520(C)
REPORTING REQUIREMENTS	hdr
Reporting - Annual Inspection Results: After each inspection required under 40 CFR Section 60.113b(a)(2) or Section 60.113b(a)(3) that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in 40 CFR Section 60.113b(a)(2), a report shall be furnished to the Commissioner within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of 40 CFR Section 60.112b(a)(1) or 40 CFR Section 60.113b(a)(3) and the date the storage vessel was emptied or the nature of and the date the repair was made.	40 CFR Section 60.115b(a)(3) and (4); Minn. R. 7011.1520(C)
Notification: Furnish the Commissioner with a report describing the internal floating roof and certifying that it meets the specifications of 40 CFR Section 60.112b(a)(1) and 40 CFR Section 60.113b(a)(1). The report shall be an attachment to the notification of actual date of initial startup required by 40 CFR Section 60.7(a)(3).	40 CFR Section 60.115b(a)(1); Minn. R. 7011.1520(C)
Notification: If an inspection is required (under 40 CFR Section 60.113b(a)(1) or 40 CFR Section 60.113b(a)(4)), notify the Commissioner in writing at least 30 days prior to the filling or refilling of the storage vessel, to afford the Commissioner the opportunity to have an observer present. If the inspection is not planned and the owner or operator could not have known about the inspection 30 days in advance of the refilling the tank, the owner or operator shall notify the Commissioner at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Commissioner at least 7 days prior to refilling.	40 CFR Section 60.113b(a)(5); Minn. R. 7011.1520(C)
Notification: Within 30 days of each occurrence, notify the Commissioner when the maximum true vapor pressure exceeds 5.2 kPa.	40 CFR Section 60.116b(d); Minn. R. 7011.1520(C)
Notification of any physical or operational change which increases emission rate: due 60 days (or as soon as practical) before the change is commenced.	40 CFR Section 60.7(a)(4); Minn. R. 7019.0100, subp. 1



# TABLE A: LIMITS AND OTHER REQUIREMENTS

A-7

10/25/06

Facility Name: Otter Tail Ag Enterprises LLC

Permit Number: 11100077 - 001

**Subject Item:** GP 002 Material Handling Baghouse Monitoring Requirements

**Associated Items:** CE 001 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

~~CE 002 Fabric Filter - Low Temperature, i.e., T<180 Degrees F~~

~~CE 003 Fabric Filter - Low Temperature, i.e., T<180 Degrees F~~

~~CE 004 Fabric Filter - Low Temperature, i.e., T<180 Degrees F~~

~~CE 005 Fabric Filter - Low Temperature, i.e., T<180 Degrees F~~

~~CE 006 Fabric Filter - Low Temperature, i.e., T<180 Degrees F~~

~~CE 007 Fabric Filter - Low Temperature, i.e., T<180 Degrees F~~

CE 008 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

~~CE 009 Fabric Filter - Low Temperature, i.e., T<180 Degrees F~~

~~CE 010 Fabric Filter - Low Temperature, i.e., T<180 Degrees F~~

CE 011 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

What to do	Why to do it
POLLUTION CONTROL REQUIREMENTS	hdr
Total Particulate Matter: less than or equal to 99 percent collection efficiency . The Permittee shall operate and maintain the fabric filters such that they achieve a 99% percent collection efficiency. This limit applies individually to each fabric filter.	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; Minn. R. 7007.0800, subp. 2 and 14.
Particulate Matter < 10 micron: greater than or equal to 99 percent collection efficiency . The Permittee shall operate and maintain the fabric filters such that they achieve 99% collection efficiency. This limit applies individually to each fabric filter.	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as major source under 40 CFR Section 70.2 and Minn. R. 7007.0200; Minn. R. 7007.0800, subp. 2 and 14.
Pressure Drop: less than or equal to 1.0 inches of water column and less than or equal to 6.0 inches of water column, unless a new range is required to be set pursuant to Minn. R. 7017.2025, subp. 3. If a new range is required to be set, it will be based on the values recorded during the most recent MPCA approved performance test where compliance was demonstrated. The Permittee shall record the pressure drop once every 24 hours when in operation.	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as major source under 40 CFR Section 70.2 and Minn. R. 7007.0200; Minn. R. 7007.0800, subp. 2 and 14.
Visible Emissions: The Permittee shall check the fabric filter stacks (SV 001 through SV 011) for any visible emissions once each day of operation during daylight hours. During inclement weather, document the pressure drop reading from the previous requirement to satisfy this requirement.	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as a major source under 40 CFR Section 70.2 and Minn. R. 7007.0200; Minn. R. 7007.0800, subp. 4 and 5.
Recordkeeping of Visible Emissions and Pressure Drop. The Permittee shall record the time and date of each visible emission inspection and pressure drop reading, and whether or not any visible emissions were observed, and whether or not the observed pressure drop was within the range specified in this permit	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as a major source under 40 CFR Section 70.2 and Minn. R. 7007.0200; Minn. R. 7007.0800, subp. 4 and 5
The Permittee shall operate and maintain the fabric filter at all times that any emission unit controlled by the fabric filter is in operation. The Permittee shall document periods of non-operation of the control equipment.	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as major source under 40 CFR Section 70.2 and Minn. R. 7007.0200; Minn. R. 7007.0800, subp. 2 and 14.
The Permittee shall operate and maintain the fabric filter in accordance with the control equipment manufacturer's specifications and/or in accordance with Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff.	Minn. R. 7007.0800, subp. 14.
Calibrate gauges annually, or as often as required by manufacturing specifications and maintain a written record of the calibration and any action resulting from the calibration.	Minn. R. 7007.0800, subp. 2 and subp. 14.
Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation.	Minn. R. 7007.0800, subp. 4.

**TABLE A: LIMITS AND OTHER REQUIREMENTS****A-8**

10/25/06

Facility Name: Otter Tail Ag Enterprises LLC

Permit Number: 11100077 - 001

<p>Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur:</p> <ul style="list-style-type: none"><li>- visible emissions are observed;</li><li>- the recorded pressure drop is outside the required operating range; or</li><li>- the fabric filter or any of its components are found during the inspections to need repair.</li></ul> <p>Corrective actions shall return the pressure drop to within the permitted range, eliminate visible emissions, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O &amp; M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter.</p>	<p>Minn. R. 7007.0800, subp. 4, 5, and 14.</p>
<p>Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections.</p>	<p>Minn. R. 7007.0800, subp. 4, 5 and 14.</p>



**TABLE A: LIMITS AND OTHER REQUIREMENTS****A-9**

10/25/06

Facility Name: Otter Tail Ag Enterprises LLC

Permit Number: 11100077 - 001

**Subject Item:** GP 003 Emergency Units**Associated Items:** EU 026 Fire Pump - test only

EU 027 Emergency Generator - 500 hrs

SV 020 Fire Pump

SV 021 Emergency Generator

What to do	Why to do it
EMISSION LIMITS	hdr
Opacity: less than or equal to 20 percent opacity once operating temperatures have been attained.	Minn. R. 7011.2300, subp. 1
Sulfur Dioxide: less than or equal to 0.5 lbs/million Btu heat input	Minn. R. 7011.2300, subp. 2
OPERATING REQUIREMENTS	hdr
Fuel type: No. 2 fuel oil only.	Title I Condition: To avoid classification as major source under 40 CFR Section 52.21 & Minn. R. 7007.3000; to avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200
Operating Hours: less than or equal to 500 hours/year using 12-month Rolling Sum to be calculated by the 15th day of each month.	Title I Condition: To avoid classification as major source under 40 CFR Section 52.21 & Minn. R. 7007.3000; to avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200
RECORDKEEPING REQUIREMENTS	hdr
Hours of Operation: The Permittee shall maintain documentation on site that the unit is an emergency generator by design that qualifies under the U.S. EPA memorandum entitled "Calculating Potential to Emit (PTE) for Emergency Generators" dated September 6, 1995, limiting operation to 500 hours per year.	Minn. R. 7007.0800, subp. 4 & 5
Fuel Supplier Certification: The Permittee shall obtain and maintain a fuel supplier certification for each shipment of No. 2 fuel oil, certifying that the sulfur content does not exceed 0.5% by weight.	Minn. R. 7007.0800, subp. 4 & 5
Fuel Use: The Permittee shall maintain fuel use records, documenting that only #2 fuel oil is used.	Minn. R. 7007.0800, subp. 4 & 5
NEW SOURCE PERFORMANCE STANDARDS	hdr
The Permittee shall specify stationary diesel engines compliant with NSPS Subpart IIII and obtain all certifications, representations, guidance, and documentation required to be provided under that subpart from the engine manufacturer.	40 CFR Section 60.4205 (b) & (c)
Maintain stationary CI ICE according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer, over the entire life of the engine.	40 CFR Section 60.4206
Beginning October 1, 2007, owners and operators of stationary CI ICE subject to this subpart that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(a).	40 CFR Section 60.4207 (a)
Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b).	40 CFR Section 60.4207(b)
The Permittee shall install a non-resettable hour meter prior to startup of the engine.	40 CFR Section 60.4209 (a)

# TABLE A: LIMITS AND OTHER REQUIREMENTS

A-10

10/25/06

Facility Name: Otter Tail Ag Enterprises LLC

Permit Number: 11100077 - 001

Subject Item: SV 001 Grain Receiving Baghouse 1 (CE 001)

Associated Items: EU 001 Corn Dump Pit/Auger 1

EU 002 Corn Conveyor 1

EU 003 Corn Elevator 1

*EU004 Corn Dump Pit/Auger 2*  
*EU005 Corn Conveyor 2*  
*EU006 Corn Elevator 2*  
*EU007 Transfer Conveyor 1*  
*EU008 Transfer Conveyor 2*

What to do	Why to do it
EMISSION LIMITS	hdr
Total Particulate Matter: less than or equal to <del>4.38</del> lbs/hour <i>3.17</i>	Title I Condition: To avoid classification as major source under 40 CFR Section 52.21 & Minn. R. 7007.3000
Particulate Matter < 10 micron: less than or equal to <del>4.38</del> lbs/hour <i>3.17</i>	Title I Condition: To avoid classification as major source under 40 CFR Section 52.21 & Minn. R. 7007.3000; to avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200
Opacity: less than or equal to 10 percent opacity	Minn. R. 7011.1005, subp. 3(D)
See GP 002 for monitoring requirements.	hdr
PERFORMANCE TESTING REQUIREMENTS	hdr
Initial Performance Test: due 180 days after Startup to measure Total Particulate Matter emissions.	Minn. R. 7017.2020, subp. 1
Initial Performance Test: due 180 days after Startup to measure Particulate Matter < 10 microns emissions.	Minn. R. 7017.2020, subp. 1

**TABLE A: LIMITS AND OTHER REQUIREMENTS****A-11****10/25/06**Facility Name: ~~Otter Tail Ag Enterprises LLC~~Permit Number: ~~11100077-001~~**Subject Item:** ~~SV-002 Grain Receiving Baghouse 2 (CE-002)~~**Associated Items:** ~~EU-004 Corn Dump Pit/Auger 2~~~~EU-005 Corn Conveyor 2~~~~EU-006 Corn Elevator 2~~

What to do	Why to do it
EMISSION LIMITS	hdr
<del>Total Particulate Matter: less than or equal to 1.38 lbs/hour</del>	<del>Title I Condition: To avoid classification as major source under 40 CFR Section 52.21 &amp; Minn. R. 7007.3000</del>
<del>Particulate Matter &lt; 10 micron: less than or equal to 1.38 lbs/hour</del>	<del>Title I Condition: To avoid classification as major source under 40 CFR Section 52.21 &amp; Minn. R. 7007.3000; to avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200</del>
<del>Opacity: less than or equal to 10 percent opacity</del>	<del>Minn. R. 7011.1005, subp. 3(D)</del>
<del>See GP-002 for monitoring requirements.</del>	hdr
PERFORMANCE TESTING REQUIREMENTS	hdr
<del>Initial Performance Test: due 180 days after Startup to measure Total Particulate Matter emissions.</del>	<del>Minn. R. 7017.2020, subp. 1</del>
<del>Initial Performance Test: due 180 days after Startup to measure Particulate Matter &lt; 10 microns emissions.</del>	<del>Minn. R. 7017.2020, subp. 1</del>

**TABLE A: LIMITS AND OTHER REQUIREMENTS****A-12**

10/25/06

Facility Name: ~~Otter Tail Ag Enterprises LLC~~Permit Number: ~~11100077-001~~Subject Item: ~~SV-003 Trans to Corn Bin 1 Baghouse (CE-003)~~Associated Items: ~~EU-007 Transfer Conveyor 1~~

<b>What to do</b>	<b>Why to do it</b>
<b>EMISSION LIMITS</b>	hdr
<del>Total Particulate Matter: less than or equal to 0.128 lbs/hour</del>	<del>Title I Condition: To avoid classification as major source under 40 CFR Section 52.21 &amp; Minn. R. 7007.3000</del>
<del>Particulate Matter &lt; 10 micron: less than or equal to 0.128 lbs/hour</del>	<del>Title I Condition: To avoid classification as major source under 40 CFR Section 52.21 &amp; Minn. R. 7007.3000; to avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200</del>
<del>Opacity: less than or equal to 10 percent opacity</del>	<del>Minn. R. 7011.1005, subp. 3(D)</del>
<del>See GP-002 for monitoring requirements.</del>	hdr
<b>PERFORMANCE TESTING REQUIREMENTS</b>	hdr
<del>Initial Performance Test: due 180 days after Startup to measure Total Particulate Matter emissions.</del>	<del>Minn. R. 7017.2020, subp. 1</del>
<del>Initial Performance Test: due 180 days after Startup to measure Particulate Matter &lt; 10 microns emissions.</del>	<del>Minn. R. 7017.2020, subp. 1</del>

**TABLE A: LIMITS AND OTHER REQUIREMENTS****A-13**

10/25/06

Facility Name: ~~Otter Tail Ag Enterprises LLC~~Permit Number: ~~11100077-001~~Subject Item: ~~SV-004 Trans to Corn Bin 2 Baghouse (CE-004)~~Associated Items: ~~EU-008 Transfer Conveyor 2~~

What to do	Why to do it
<del>EMISSION LIMITS</del>	<del>hdr</del>
<del>Total Particulate Matter: less than or equal to 0.128 lbs/hour</del>	<del>Title I Condition: To avoid classification as major source under 40 CFR Section 52.21 &amp; Minn. R. 7007.3000</del>
<del>Particulate Matter &lt; 10 micron: less than or equal to 0.128 lbs/hour</del>	<del>Title I Condition: To avoid classification as major source under 40 CFR Section 52.21 &amp; Minn. R. 7007.3000; to avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200</del>
<del>Opacity: less than or equal to 10 percent opacity</del>	<del>Minn. R. 7011.1005, subp. 3(D)</del>
<del>See GP-002 for monitoring requirements.</del>	<del>hdr</del>
<del>PERFORMANCE TESTING REQUIREMENTS</del>	<del>hdr</del>
<del>Initial Performance Test: due 180 days after Startup to measure Total Particulate Matter emissions.</del>	<del>Minn. R. 7017.2020, subp. 1</del>
<del>Initial Performance Test: due 180 days after Startup to measure Particulate Matter &lt; 10 microns emissions.</del>	<del>Minn. R. 7017.2020, subp. 1</del>

**TABLE A: LIMITS AND OTHER REQUIREMENTS****A-14**

10/25/06

Facility Name: ~~Otter Tail Ag Enterprises LLC~~Permit Number: ~~11100077-001~~Subject Item: ~~SV-005 Reclaim Baghouse (CE-005)~~Associated Items: ~~EU-009 Reclaim System~~

What to do	Why to do it
<del>EMISSION LIMITS</del>	<del>hdr</del>
<del>Total Particulate Matter: less than or equal to 0.068 lbs/hour</del>	<del>Title I Condition: To avoid classification as major source under 40 CFR Section 52.21 &amp; Minn. R. 7007.3000</del>
<del>Particulate Matter &lt; 10 micron: less than or equal to 0.068 lbs/hour</del>	<del>Title I Condition: To avoid classification as major source under 40 CFR Section 52.21 &amp; Minn. R. 7007.3000; to avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200</del>
<del>Opacity: less than or equal to 10 percent opacity</del>	<del>Minn. R. 7011.1005, subp. 3(D)</del>
<del>See GP-002 for monitoring requirements.</del>	<del>hdr</del>
<del>PERFORMANCE TESTING REQUIREMENTS</del>	<del>hdr</del>
<del>Initial Performance Test: due 180 days after Startup to measure Total Particulate Matter emissions.</del>	<del>Minn. R. 7017.2020, subp. 1</del>
<del>Initial Performance Test: due 180 days after Startup to measure Particulate Matter &lt; 10 microns emissions.</del>	<del>Minn. R. 7017.2020, subp. 1</del>

**TABLE A: LIMITS AND OTHER REQUIREMENTS****A-15****10/25/06**Facility Name: ~~Otter Tail Ag Enterprises LLC~~Permit Number: ~~11100077-001~~**Subject Item:** ~~SV-006 Grinder Surge Bin Baghouse (CE-006)~~**Associated Items:** ~~EU-010 Grinder Surge Bin~~

<b>What to do</b>	<b>Why to do it</b>
<del>EMISSION LIMITS</del>	<del>hdr</del>
<del>Total Particulate Matter: less than or equal to 0.043 lbs/hour</del>	<del>Title I Condition: To avoid classification as major source under 40 CFR Section 52.21 &amp; Minn. R. 7007.3000</del>
<del>Particulate Matter &lt; 10 micron: less than or equal to 0.043 lbs/hour</del>	<del>Title I Condition: To avoid classification as major source under 40 CFR Section 52.21 &amp; Minn. R. 7007.3000; to avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200</del>
<del>Opacity: less than or equal to 10 percent opacity</del>	<del>Minn. R. 7011.1005, subp. 3(D)</del>
<del>See GP-002 for monitoring requirements.</del>	<del>hdr</del>
<del>PERFORMANCE TESTING REQUIREMENTS</del>	<del>hdr</del>
<del>Initial Performance Test: due 180 days after Startup to measure Total Particulate Matter emissions.</del>	<del>Minn. R. 7017.2020, subp. 1</del>
<del>Initial Performance Test: due 180 days after Startup to measure Particulate Matter &lt; 10 microns emissions.</del>	<del>Minn. R. 7017.2020, subp. 1</del>

**TABLE A: LIMITS AND OTHER REQUIREMENTS****A-16****10/25/06**Facility Name: ~~Otter Tail Ag Enterprises LLC~~Permit Number: ~~11100077-001~~Subject Item: ~~SV-007 Hammermill 1 Baghouse (CE-007)~~Associated Items: ~~EU-011 Hammermill 1~~

What to do	Why to do it
<del>EMISSION LIMITS</del>	<del>hdr</del>
<del>Total Particulate Matter: less than or equal to 0.51 lbs/hour</del>	<del>Title I Condition: To avoid classification as major source under 40 CFR Section 52.21 &amp; Minn. R. 7007.3000</del>
<del>Particulate Matter &lt; 10 micron: less than or equal to 0.51 lbs/hour</del>	<del>Title I Condition: To avoid classification as major source under 40 CFR Section 52.21 &amp; Minn. R. 7007.3000; to avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200</del>
<del>Opacity: less than or equal to 10 percent opacity</del>	<del>Minn. R. 7011.1005, subp. 3(D)</del>
<del>See GP-002 for monitoring requirements.</del>	<del>hdr</del>
<del>PERFORMANCE TESTING REQUIREMENTS</del>	<del>hdr</del>
<del>Initial Performance Test: due 180 days after Startup to measure Total Particulate Matter emissions.</del>	<del>Minn. R. 7017.2020, subp. 1</del>
<del>Initial Performance Test: due 180 days after Startup to measure Particulate Matter &lt; 10 microns emissions.</del>	<del>Minn. R. 7017.2020, subp. 1</del>



# TABLE A: LIMITS AND OTHER REQUIREMENTS

A-17

10/25/06

Facility Name: Otter Tail Ag Enterprises LLC

Permit Number: 11100077 - 001

Subject Item: SV 008 Hammermill 2 Baghouse (CE 008)

Associated Items:

EU 012 Hammermill 2

*EU008 Scalper  
EU009 Reclaim System; EU010 Grinder Surge Bin; EU011 Hammermill #1;  
EU055 Hammermill #3*

What to do	Why to do it
EMISSION LIMITS	hdr
Total Particulate Matter: less than or equal to <del>0.54</del> lbs/hour <i>2.04</i>	Title I Condition: To avoid classification as major source under 40 CFR Section 52.21 & Minn. R. 7007.3000
Particulate Matter < 10 micron: less than or equal to <del>0.54</del> lbs/hour <i>2.04</i>	Title I Condition: To avoid classification as major source under 40 CFR Section 52.21 & Minn. R. 7007.3000; to avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200
Opacity: less than or equal to 10 percent opacity	Minn. R. 7011.1005, subp. 3(D)
See GP 002 for monitoring requirements.	hdr
PERFORMANCE TESTING REQUIREMENTS	hdr
Initial Performance Test: due 180 days after Startup to measure Total Particulate Matter emissions.	Minn. R. 7017.2020, subp. 1
Initial Performance Test: due 180 days after Startup to measure Particulate Matter < 10 microns emissions.	Minn. R. 7017.2020, subp. 1

**TABLE A: LIMITS AND OTHER REQUIREMENTS****A-18**

10/25/06

Facility Name: ~~Otter Tail Ag Enterprises LLC~~Permit Number: ~~11100077-001~~Subject Item: ~~SV-009 DDGS Storage Reclaim Baghouse (CE-009)~~Associated Items: ~~EU-013 DDGS Storage Reclaim~~

What to do	Why to do it
<del>EMISSION LIMITS</del>	<del>hdr</del>
<del>Total Particulate Matter: less than or equal to 0.17 lbs/hour</del>	<del>Title I Condition: To avoid classification as major source under 40 CFR Section 52.21 &amp; Minn. R. 7007.3000</del>
<del>Particulate Matter &lt; 10 micron: less than or equal to 0.17 lbs/hour</del>	<del>Title I Condition: To avoid classification as major source under 40 CFR Section 52.21 &amp; Minn. R. 7007.3000; to avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200</del>
<del>Opacity: less than or equal to 10 percent opacity</del>	<del>Minn. R. 7011.1005, subp. 3(D)</del>
<del>See GP-002 for monitoring requirements.</del>	<del>hdr</del>
<del>PERFORMANCE TESTING REQUIREMENTS</del>	<del>hdr</del>
<del>Initial Performance Test: due 180 days after Startup to measure Total Particulate Matter emissions.</del>	<del>Minn. R. 7017.2020, subp. 1</del>
<del>Initial Performance Test: due 180 days after Startup to measure Particulate Matter &lt; 10 microns emissions.</del>	<del>Minn. R. 7017.2020, subp. 1</del>

**TABLE A: LIMITS AND OTHER REQUIREMENTS****A-19**

10/25/06

Facility Name: ~~Otter Tail Ag Enterprises LLC~~Permit Number: ~~11100077-001~~Subject Item: ~~SV-010 Bulkweigher Baghouse (CE-010)~~Associated Items: ~~EU-014 Bulkweigher~~

What to do	Why to do it
<del>EMISSION LIMITS</del>	<del>hdr</del>
<del>Total Particulate Matter: less than or equal to 0.034 lbs/hour</del>	<del>Title I Condition: To avoid classification as major source under 40 CFR Section 52.21 &amp; Minn. R. 7007.3000</del>
<del>Particulate Matter &lt; 10 micron: less than or equal to 0.034 lbs/hour</del>	<del>Title I Condition: To avoid classification as major source under 40 CFR Section 52.21 &amp; Minn. R. 7007.3000; to avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200</del>
<del>Opacity: less than or equal to 10 percent opacity</del>	<del>Minn. R. 7011.1005, subp. 3(D)</del>
<del>See GP-002 for monitoring requirements.</del>	<del>hdr</del>
<del>PERFORMANCE TESTING REQUIREMENTS</del>	<del>hdr</del>
<del>Initial Performance Test: due 180 days after Startup to measure Total Particulate Matter emissions.</del>	<del>Minn. R. 7017.2020, subp. 1</del>
<del>Initial Performance Test: due 180 days after Startup to measure Particulate Matter &lt; 10 microns emissions.</del>	<del>Minn. R. 7017.2020, subp. 1</del>

**TABLE A: LIMITS AND OTHER REQUIREMENTS****A-20**

10/25/06

Facility Name: Otter Tail Ag Enterprises LLC

Permit Number: 11100077 - 001

**Subject Item:** SV 011 DDGS Loadout Baghouse (CE 011)**Associated Items:** EU 015 DDGS Conveyor

EU 016 DDGS Load Spout

*EU013 DDGS<sup>storage</sup> Reclaim*  
*EU014 Bulk weigher*

What to do	Why to do it
EMISSION LIMITS	hdr
Total Particulate Matter: less than or equal to <del>0.16</del> lbs/hour <i>0.41</i>	Title I Condition: To avoid classification as major source under 40 CFR Section 52.21 & Minn. R. 7007.3000
Particulate Matter < 10 micron: less than or equal to <del>0.16</del> lbs/hour <i>0.41</i>	Title I Condition: To avoid classification as major source under 40 CFR Section 52.21 & Minn. R. 7007.3000; to avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200
Opacity: less than or equal to 10 percent opacity	Minn. R. 7011.1005, subp. 3(D)
See GP 002 for monitoring requirements.	hdr
PERFORMANCE TESTING REQUIREMENTS	hdr
Initial Performance Test: due 180 days after Startup to measure Total Particulate Matter emissions.	Minn. R. 7017.2020, subp. 1
Initial Performance Test: due 180 days after Startup to measure Particulate Matter < 10 microns emissions.	Minn. R. 7017.2020, subp. 1

**TABLE A: LIMITS AND OTHER REQUIREMENTS****A-21**

10/25/06

Facility Name: Otter Tail Ag Enterprises LLC

Permit Number: 11100077 - 001

**Subject Item: SV 026 CO2 Scrubber (CE 027)****Associated Items:** EU 033 Yeast Tank

EU 034 Fermenter 1

EU 035 Fermenter 2

EU 036 Fermenter 3

EU 037 Fermenter 4

EU 038 Beerwell

What to do	Why to do it
EMISSION LIMITS	hdr
Volatile Organic Compounds: less than or equal to 5.09 lbs/hour	Title I Condition: To avoid classification as major source and modification under 40 CFR Section 52.21 & Minn. R. 7007.3000; to avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200
POLLUTION CONTROL REQUIREMENTS	hdr
Volatile Organic Compounds: greater than or equal to 95 percent control efficiency	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as major source under 40 CFR Section 70.2 and Minn. R. 7007.0200; Minn. R. 7007.0800, subp. 2 and 14
Pressure Drop: greater than or equal to 2.0 inches of water column and less than or equal to 6.0 inches of water column or as determined during compliance testing.	Title I Condition: To avoid classification as major source and modification under 40 CFR Section 52.21 & Minn. R. 7007.3000; to avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200
Water flow rate: greater than or equal to 55 gallons/minute or as determined during compliance testing.	Title I Condition: To avoid classification as major source and modification under 40 CFR Section 52.21 & Minn. R. 7007.3000; to avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200
MONITORING REQUIREMENTS	hdr
The Permittee shall record the Pressure Drop and Water Flow Rate of each scrubber once each day of operation.	Title I Condition: To avoid classification as major source and modification under 40 CFR Section 52.21 & Minn. R. 7007.3000; to avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200
The Permittee shall operate and maintain the scrubber at all times that any emission unit controlled by the scrubber is in operation. The Permittee shall document periods of non-operation of the control equipment.	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as major source under 40 CFR Section 70.2 and Minn. R. 7007.0200; Minn. R. 7007.0800, subp. 2 and 14.
The Permittee shall operate and maintain the scrubber in accordance with the control equipment manufacturer's specifications and/or in accordance with Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff.	Minn. R. 7007.0800, subp. 14.
Calibrate gauges annually, or as often as required by manufacturing specifications and maintain a written record of the calibration and any action resulting from the calibration.	Minn. R. 7007.0800, subp. 2 and subp. 14.
Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording pressure drop and water flow rate as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored scrubber is in operation.	Minn. R. 7007.0800, subp. 4.

**TABLE A: LIMITS AND OTHER REQUIREMENTS****A-22**

10/25/06

Facility Name: Otter Tail Ag Enterprises LLC

Permit Number: 11100077 - 001

Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the recorded pressure drop or water flow rate is outside the required operating range; or - the scrubber or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop and/or water flow rate to within the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the scrubber. The Permittee shall keep a record of the type and date of any corrective action taken for each scrubber.	Minn. R. 7007.0800, subp. 4, 5, and 14.
Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections.	Minn. R. 7007.0800, subp. 4, 5 and 14.
PERFORMANCE TESTING REQUIREMENTS	hdr
Initial Performance Test: due 180 days after Initial Startup to measure VOC emissions	Minn. R. 7017.2020, subp. 1
If compliance testing shows a rolling sum pace, such that Acetaldehyde emissions are projected to exceed the Total Facility Single HAP limit of 9.0 tons per year, the Permittee shall install tanks and dosing equipment necessary to add Sodium Bisulfite or other additive to the scrubber and re-test for Acetaldehyde within 60 days. The rate of additive dosing determined necessary shall become an enforceable parametric condition of this permit.  The Permittee may propose alternate measures to control Acetaldehyde emissions.	Title I Condition: To avoid classification as major source under 40 CFR Section 63.2; to avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200

**TABLE A: LIMITS AND OTHER REQUIREMENTS****A-23**

10/25/06

Facility Name: Otter Tail Ag Enterprises LLC

Permit Number: 11100077 - 001

**Subject Item: SV 027 Vent Gas Scrubber (CE 028)****Associated Items:** EU 039 Liquefaction Tank

EU 040 Beer Stripper

EU 041 Side Stripper

EU 042 Rectifier

EU 043 Molecular Sieve

EU 044 Evaporator

EU 045 Centrifuge 1

EU 046 Centrifuge 2

EU 047 Centrifuge 3

EU 048 Centrifuge 4

EU 049 Centrate Tank

What to do	Why to do it
EMISSION LIMITS	hdr
Volatile Organic Compounds: less than or equal to 1.15 lbs/hour	Title I Condition: To avoid classification as major source and modification under 40 CFR Section 52.21 & Minn. R. 7007.3000; to avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200
POLLUTION CONTROL REQUIREMENTS	hdr
Volatile Organic Compounds: greater than or equal to 95 percent control efficiency	Title I Condition: To avoid classification as a major source and modification under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as major source under 40 CFR Section 70.2 and Minn. R. 7007.0200; Minn. R. 7007.0800, subp. 2 and 14
Pressure Drop: greater than or equal to 2.0 inches of water column and less than or equal to 6.0 inches of water column or as determined during compliance testing.	Title I Condition: To avoid classification as major source and modification under 40 CFR Section 52.21 & Minn. R. 7007.3000; to avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200
Water flow rate: greater than or equal to 6 gallons/minute or as determined during compliance testing.	Title I Condition: To avoid classification as major source and modification under 40 CFR Section 52.21 & Minn. R. 7007.3000; to avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200
MONITORING REQUIREMENTS	hdr
The Permittee shall record the Pressure Drop and Water Flow Rate of each scrubber once each day of operation.	Title I Condition: To avoid classification as major source and modification under 40 CFR Section 52.21 & Minn. R. 7007.3000; to avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200
The Permittee shall operate and maintain the scrubber at all times that any emission unit controlled by the scrubber is in operation. The Permittee shall document periods of non-operation of the control equipment.	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as major source under 40 CFR Section 70.2 and Minn. R. 7007.0200; Minn. R. 7007.0800, subp. 2 and 14.
The Permittee shall operate and maintain the scrubber in accordance with the control equipment manufacturer's specifications and/or in accordance with Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff.	Minn. R. 7007.0800, subp. 14.
Calibrate gauges annually, or as often as required by manufacturing specifications and maintain a written record of the calibration and any action resulting from the calibration.	Minn. R. 7007.0800, subp. 2 and subp. 14.
Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording pressure drop and water flow rate as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored scrubber is in operation.	Minn. R. 7007.0800, subp. 4.

**TABLE A: LIMITS AND OTHER REQUIREMENTS****A-24**

10/25/06

Facility Name: Otter Tail Ag Enterprises LLC

Permit Number: 11100077 - 001

Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the recorded pressure drop or water flow rate is outside the required operating range; or - the scrubber or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop and/or water flow rate to within the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the scrubber. The Permittee shall keep a record of the type and date of any corrective action taken for each scrubber.	Minn. R. 7007.0800, subp. 4, 5, and 14.
Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections.	Minn. R. 7007.0800, subp. 4, 5 and 14.
PERFORMANCE TESTING REQUIREMENTS	hdr
Initial Performance Test: due 180 days after Initial Startup to measure VOC emissions	Minn. R. 7017.2020, subp. 1



**TABLE A: LIMITS AND OTHER REQUIREMENTS****A-25**

10/25/06

Facility Name: Otter Tail Ag Enterprises LLC

Permit Number: 11100077 - 001

**Subject Item:** EU 028 Boiler 1**Associated Items:** CE 023 Low NOx Burners

SV 022 Boiler 1

What to do	Why to do it
Nitrogen Oxides: less than or equal to 4.62 lbs/hour using 3-hour Rolling Average	Title I Condition: To avoid classification as major source under 40 CFR Section 52.21 & Minn. R. 7007.3000; to avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200
Carbon Monoxide: less than or equal to 4.16 lbs/hour using 3-hour Rolling Average	Title I Condition: To avoid classification as major source under 40 CFR Section 52.21 & Minn. R. 7007.3000; to avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200
Fuel Burned: Natural Gas with Propane back-up only.	Minn. Stat. Section 116.07, subd. 4a; Minn. R. 7007.0800, subp. 2
Total Particulate Matter: less than or equal to 0.03 lbs/million Btu heat input . Fuel use limitation satisfies this requirement. PTE = 0.007 lb/MMBtu.	40 CFR Section 60.43c
Sulfur Dioxide: less than or equal to 0.54 lbs/million Btu heat input . Fuel use limitation satisfies this requirement. PTE = 0.00057 lb/MMBtu.	40 CFR Section 60.42c
Recordkeeping: By the last day of each calendar month, the Permittee shall record the amount of natural gas or propane combusted in the boilers during the previous calendar month. These records shall consist of purchase records, receipts, or fuel meter readings.	40 CFR Section 60.48c(g)
Initial Performance Test: due 180 days after Initial Startup to measure NOx emissions.	Minn. R. 7017.2020, subp. 1
Initial Performance Test: due 180 days after Initial Startup to measure CO emissions.	Minn. R. 7017.2020, subp. 1

**TABLE A: LIMITS AND OTHER REQUIREMENTS****A-26**

10/25/06

Facility Name: Otter Tail Ag Enterprises LLC

Permit Number: 11100077 - 001

**Subject Item:** EU 029 Boiler 2**Associated Items:** CE 024 Low NOx Burners

SV 023 Boiler 2

What to do	Why to do it
Nitrogen Oxides: less than or equal to 4.62 lbs/hour using 3-hour Rolling Average	Title I Condition: To avoid classification as major source under 40 CFR Section 52.21 & Minn. R. 7007.3000; to avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200
Carbon Monoxide: less than or equal to 4.16 lbs/hour using 3-hour Rolling Average	Title I Condition: To avoid classification as major source under 40 CFR Section 52.21 & Minn. R. 7007.3000; to avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200
Fuel Burned: Natural Gas with Propane back-up only.	Minn. Stat. Section 116.07, subd. 4a; Minn. R. 7007.0800, subp. 2
Total Particulate Matter: less than or equal to 0.03 lbs/million Btu heat input . Fuel use limitation satisfies this requirement. PTE = 0.007 lb/MMBtu.	40 CFR Section 60.43c
Sulfur Dioxide: less than or equal to 0.54 lbs/million Btu heat input . Fuel use limitation satisfies this requirement. PTE = 0.00057 lb/MMBtu.	40 CFR Section 60.42c
Initial Performance Test: due 180 days after Initial Startup to measure NOx emissions.	Minn. R. 7017.2020, subp. 1
Initial Performance Test: due 180 days after Initial Startup to measure CO emissions.	Minn. R. 7017.2020, subp. 1

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Otter Tail Ag Enterprises LLC  
Permit Number: 11100077 - 001

Subject Item: EU 050 DDGS Dryer

Associated Items: CE 029 Multiple Cyclone w/o Fly Ash Reinjection - Most Multiclones  
CE 030 Thermal Oxidizer  
SV 028 RTO (CE 030)

What to do	Why to do it
Vent all gasses to the RTO (CE 030). If the control equipment breaks down, discontinue feed to the dryer.	Title 1 Condition: Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as major source under 40 CFR Section 70.2 and Minn. R. 7007.0200; Minn. R. 7007.0800, subp. 2 and 14

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Otter Tail Ag Enterprises LLC  
Permit Number: 11100077 - 001

Subject Item: EU 051 DDGS Cooler  
Associated Items: CE 030 Thermal Oxidizer  
SV 028 RTO (CE 030)

What to do	Why to do it
Vent all gasses to the RTO (CE 030). If the control equipment breaks down, discontinue feed to the dryer.	Title 1 Condition: Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as major source under 40 CFR Section 70.2 and Minn. R. 7007.0200; Minn. R. 7007.0800, subp. 2 and 14

**TABLE A: LIMITS AND OTHER REQUIREMENTS****A-29**

10/25/06

Facility Name: Otter Tail Ag Enterprises LLC

Permit Number: 11100077 - 001

**Subject Item:** EU 054 Wetcake - AOS**Associated Items:** CE 032 Other

What to do	Why to do it
Wetcake Storage Limitation: When wetcake by-product is produced, it shall be stored for no longer than 72 hours on-site. In all cases, the wetcake shall be removed from the facility as soon as possible.	Minn. R. 7007.0800, subp. 2.
Recordkeeping: Record date and time of beginning wetcake production and how much was produced. Record date and time wetcake was removed from storage and how much.	Minn. R. 7007.0800, subp. 4 & 5

**TABLE A: LIMITS AND OTHER REQUIREMENTS****A-30**

10/25/06

Facility Name: Otter Tail Ag Enterprises LLC

Permit Number: 11100077 - 001

**Subject Item:** CE 026 Flaring**Associated Items:** EU 031 Non-Dedicated Fleet EtOH Loadout

What to do	Why to do it
The Permittee shall vent all emissions when loading ethanol to non-dedicated fleet trucks, to the flare.	Title I Condition: To limit potential to emit to less than major source levels as defined by 40 CFR Section 52.21 & 40 CFR Section 70.2
Recordkeeping: The Permittee shall maintain a monthly record of the number of gallons of denatured ethanol loaded, to determine compliance with the facility-wide emissions limit and to report emissions from flaring.	Title I Condition: To limit potential to emit to less than major source levels as defined by 40 CFR Section 52.21 & 40 CFR Section 70.2
EMISSION LIMITS	hdr
Flares must be designed for and operated with no visible emissions except for a period not to exceed a total of 5.0 minutes during any 2.0 consecutive hours.	Minn. R. 7007.0800, subp. 14 & 16(J)
OPERATING REQUIREMENTS	hdr
Operating Requirement: Flares shall be operated with a flame present at all times.	Minn. R. 7007.0800, subp. 14 & 16(J)
Operation Requirement: Flame presence shall be monitored using a thermocouple or any other equivalent device.	Minn. R. 7007.0800, subp. 14 & 16(J)
Operating Requirement: Flares shall be used only with the net heating value of the gas being combusted being 200 Btu/scf or greater if the flares is nonassisted.	Minn. R. 7007.0800, subp. 14 & 16(J)
Operation Requirement: Flares shall be operated at all times when emissions may be vented to them.	Minn. R. 7007.0800, subp. 14 & 16(J)
Records Requirement: Keep a record of any startup, shutdown, or malfunction in the affected facility or malfunction of the air pollution control equipment.	Minn. R. 7007.0800, subp. 14 & 16(J)
Summary Report: Submit report quarterly, postmarked by the 30th day following the end of each calendar quarter. Summary report content and format is defined in 40 CFR Section 60.7(d).	Minn. R. 7007.0800, subp. 14 & 16(J)
Summary report submittal frequency may be reduced according to compliance status and notification procedures defined by 40 CFR Section 60.7(e).	Minn. R. 7007.0800, subp. 14 & 16(J)
Recordkeeping: Maintain a file of all measurements, CMS performance evaluations, calibration checks, adjustments and maintenance, and all other information required by this part in permanent form, suitable for inspection for at least two years following the date of such measurements, maintenance, and records.	Minn. R. 7007.0800, subp. 14 & 16(J)
Compliance Requirement: For opacity standards, use Reference Method 9 to determine initial compliance, the minimum total time of observations shall be 3 hours (30-6 minutes averages) for the performance test or other set of observations (meaning those fugitive type emission sources subject only to an opacity standard).	Minn. R. 7007.0800, subp. 14 & 16(J)
Operation Requirement: At all times, including periods of startup, shutdown, and malfunction, owners shall maintain and operate any affected facility in manner consistent with good air pollution control practice for minimizing emissions.	Minn. R. 7007.0800, subp. 14 & 16(J)
Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.	
Performance and Opacity Tests: Results shall be sent to the Commissioner.	Minn. R. 7007.0800, subp. 14 & 16(J)
Construction and Operation Requirement: Steam assisted flares shall be designed and operated with an exit velocity of less than 60 ft/sec.	Minn. R. 7007.0800, subp. 14 & 16(J)
Construction and Operation Requirement: Steam assisted flares designed and operated with an exit velocity equal to or greater than 60 ft/sec but less than 200 ft/sec are allowed if the heating value of the combustion gas is greater than 1,000 Btu/scf.	Minn. R. 7007.0800, subp. 14 & 16(J)
Construction and Operation Requirement: Steam assisted flares designed and operated with an exit velocity less than Vmax (as determined by the method specified in 40 CFR Section 60.18(f)(5)) and less than 400 ft/sec are allowed.	Minn. R. 7007.0800, subp. 14 & 16(J)
Construction Requirement: Flares used to comply with this section shall be steam assisted, air assisted, or nonassisted.	Minn. R. 7007.0800, subp. 14 & 16(J)
Operation Requirement: Flares shall be monitored to ensure that they are operated and maintained in conformance with their design.	Minn. R. 7007.0800, subp. 14 & 16(J)
Compliance Requirement: Reference Method 22 shall be used to determine the compliance of flares with the visible emissions provisions of this subpart.	Minn. R. 7007.0800, subp. 14 & 16(J)

**TABLE A: LIMITS AND OTHER REQUIREMENTS****A-31**

10/25/06

Facility Name: Otter Tail Ag Enterprises LLC

Permit Number: 11100077 - 001

**Subject Item:** CE 030 Thermal Oxidizer**Associated Items:** EU 050 DDGS Dryer

EU 051 DDGS Cooler

What to do	Why to do it
EMISSION LIMITS	hdr
Total Particulate Matter: less than or equal to 5.15 lbs/hour using 3-hour Rolling Average	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as major source under 40 CFR Section 70.2 and Minn. R. 7007.0200; Minn. R. 7007.0800, subp. 2 and 14
Nitrogen Oxides: less than or equal to 11.32 lbs/hour using 3-hour Rolling Average	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as major source under 40 CFR Section 70.2 and Minn. R. 7007.0200; Minn. R. 7007.0800, subp. 2 and 14
Volatile Organic Compounds: less than or equal to 7.89 lbs/hour using 3-hour Rolling Average	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as major source under 40 CFR Section 70.2 and Minn. R. 7007.0200; Minn. R. 7007.0800, subp. 2 and 14
Carbon Monoxide: less than or equal to 12.91 lbs/hour using 3-hour Rolling Average	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as major source under 40 CFR Section 70.2 and Minn. R. 7007.0200; Minn. R. 7007.0800, subp. 2 and 14
OPERATIONAL REQUIREMENTS	hdr
Volatile Organic Compounds: greater than or equal to 95 percent destruction efficiency . The Permittee shall operate & maintain the Thermal Oxidizer such that it achieves no less than 95 percent destruction efficiency for VOC.	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as major source under 40 CFR Section 70.2 and Minn. R. 7007.0200; Minn. R. 7007.0800, subp. 2 and 14
Carbon Monoxide: greater than or equal to 90 percent destruction efficiency . The Permittee shall operate & maintain the Thermal Oxidizer such that it achieves no less than 90 percent destruction efficiency for CO.	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as major source under 40 CFR Section 70.2 and Minn. R. 7007.0200; Minn. R. 7007.0800, subp. 2 and 14
Temperature: greater than or equal to 1400 degrees F using 3-hour Rolling Average at the Combustion Chamber unless a new minimum temperature is required set pursuant to Minn. R. 7017.2025, subp. 3. If a new minimum temperature is required to be set, it will be based on the average temperature recorded during the most recent MPCA approved performance test where compliance for VOC emissions was demonstrated. If the three-hour rolling average temperature drops below the minimum temperature limit, the VOC used during that time shall be considered uncontrolled until the average minimum temperature limit is once again achieved. This shall be reported as a deviation.	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as major source under 40 CFR Section 70.2 and Minn. R. 7007.0200; Minn. R. 7007.0800, subp. 2 and 14
The Permittee shall operate and maintain the thermal oxidizer any time that any process equipment controlled by the thermal oxidizer is in operation. The Permittee shall document periods of non-operation of the control equipment.	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as major source under 40 CFR Section 70.2 and Minn. R. 7007.0200; Minn. R. 7007.0800, subp. 2 and 14
Corrective Actions: If the temperature is below the minimum specified by this permit or if the thermal oxidizer or any of its components are found during the inspections to need repair, the Permittee shall take corrective action as soon as possible. Corrective actions shall return the temperature to at least the permitted minimum and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the thermal oxidizer. The Permittee shall keep a record of the type and date of any corrective action taken.	Minn. R. 7007.0800, subp. 4, 5, and 14
The Permittee shall operate and maintain the thermal oxidizer in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff.	Minn. R. 7007.0800, subp. 14
MONITORING/RECORDKEEPING	hdr

**TABLE A: LIMITS AND OTHER REQUIREMENTS****A-32**

10/25/06

Facility Name: Otter Tail Ag Enterprises LLC

Permit Number: 11100077 - 001

The Permittee shall maintain a continuous hard copy readout or computer disk file of the temperature readings and calculated three hour rolling average temperatures for the combustion chamber.	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as a major source under 40 CFR Section 70.2 and Minn. R. 7007.0200; Minn. R. 7007.0800, subp. 4 and 5
Monitoring Equipment: The Permittee shall install and maintain thermocouples to conduct temperature monitoring required by this permit. The monitoring equipment must be installed, in use, and properly maintained whenever operation of the monitored control equipment is required.	Minn. R. 7007.0800, subp. 4
Daily Monitoring: The Permittee shall physically verify the operation of the temperature recording device at least once each operating day to verify that it is working and recording properly. The Permittee shall maintain a written record of the daily verifications.	Minn. R. 7007.0800, subp. 4 and 5
The Permittee shall maintain and operate a thermocouple monitoring device that continuously indicates and records the combustion chamber temperature of the thermal oxidizer. The monitoring device shall have a margin of error less than the greater of +/- 0.75 percent of the temperature being measured or +/- 2.5 degrees Celsius. The recording device shall also calculate the three-hour rolling average combustion chamber temperature.	Minn. R. 7007.0800, subp. 4 and 5
Quarterly Inspections: At least once per calendar quarter, the Permittee shall inspect the control equipment internal and external system components, including but not limited to the refractory, heat exchanger, and electrical systems. The Permittee shall maintain a written record of the inspection and any corrective actions taken resulting from the inspection.	Minn. R. 7007.0800, subp. 4, 5, and 14
Annual Calibration: The Permittee shall calibrate the temperature monitor at least annually and shall maintain a written record of the calibration and any action resulting from the calibration.	Minn. R. 7007.0800, subp. 4, 5, and 14
PERFORMANCE TESTING	hdr
Initial Performance Test: due 180 days after Initial Startup to measure PM emissions.	Minn. R. 7017.2020, subp. 1; 40 CFR Section 60.8(a); 40 CFR Section 63.7
Initial Performance Test: due 180 days after Initial Startup to measure NOx emissions.	Minn. R. 7017.2020, subp. 1; 40 CFR Section 60.8(a); 40 CFR Section 63.7
Initial Performance Test: due 180 days after Initial Startup to measure VOC emissions.	Minn. R. 7017.2020, subp. 1; 40 CFR Section 60.8(a); 40 CFR Section 63.7
Initial Performance Test: due 180 days after Initial Startup to measure CO emissions.	Minn. R. 7017.2020, subp. 1; 40 CFR Section 60.8(a); 40 CFR Section 63.7



**TABLE A: LIMITS AND OTHER REQUIREMENTS****A-33**

10/25/06

Facility Name: Otter Tail Ag Enterprises LLC

Permit Number: 11100077 - 001

**Subject Item:** FS 004 Truck Traffic**Associated Items:** CE 020 Other

What to do	Why to do it
"CE 020 Other" is control measures taken to minimize fugitive dust from truck traffic.	hdr
All haul roads will be paved and maintained.  The Permittee shall conduct and keep a written record of yearly inspections of all haul roads for wear and tear and subsequent repairs.  All haul roads should use only salt and not sand for wintertime ice abatement.  The Permittee shall conduct and keep a written record of weekly visual inspections of all haul roads for visible silt loading.  All haul roads will be swept/cleaned monthly or when silt has accumulated to visible levels on the road, whichever occurs first.  Speed limit signage: 10 mph on truck entrance road, 30 mph on employee entrance road, 5 mph on all other haul roads.	Minn. R. 7009.0020

**TABLE A: LIMITS AND OTHER REQUIREMENTS****A-34**

10/25/06

Facility Name: Otter Tail Ag Enterprises LLC

Permit Number: 11100077 - 001

**Subject Item: FS 005 Equipment Leaks****Associated Items:** CE 031 Other

What to do	Why to do it
"CE 031 Other" is control measures taken to minimize emissions resulting from leaks.	hdr
STANDARDS: PUMPS	hdr
Pumps in light liquid service: (a)(1) Each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in 40 CFR Section 60.485(b), except as provided in 40 CFR Section 60.482-1(c) and paragraphs (d), (e), and (f). (2) Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the seal.	40 CFR Section 60.482-2(b) and (c); Minn. R. 7011.2900
(b)(1) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected. (2) If there are indications of liquids dripping from the pump seal, a leak is detected. (c)(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as proved in 40 CFR Section 60.482-9 (Delay of Repair). (2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.	40 CFR Section 60.482-2(b) and (c); Minn. R. 7011.2900
STANDARDS: COMPRESSORS	hdr
(a) Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of VOC to the atmosphere, except as provided in 40 CFR Section 60.482-1(c) and 40 CFR Section 60.482-3(h) and (i).	40 CFR Section 60.482-3(a); Minn. R. 7011.2900
(b) Each compressor seal system shall be: (1) Operated with the barrier fluid at a pressure that is greater than the compressor stuffing box pressure; or (2) Equipped with a barrier fluid system that is connected by a closed vent system to a control device that complies with the requirements of 40 CFR Section 60.482-10; or (3) Equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere.	40 CFR Section 60.482-3(b); Minn. R. 7011.2900
(c) The barrier fluid system shall be in heavy liquid service or shall not be in VOC service. (d) Each barrier fluid system shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both.	40 CFR Section 60.482-3(c) and (d); Minn. R. 7011.2900
(e)(1) Each sensor shall be checked daily or shall be equipped with an audible alarm. (2) The owner or operator shall determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.	40 CFR Section 60.482-3(e); Minn. R. 7011.2900
(f) If the sensor indicates failure of the seal system, the barrier system, or both based on the criterion determined under paragraph (e)(2), a leak is detected.	40 CFR Section 60.482-3(f); Minn. R. 7011.2900
(g)(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected except as provided in 40 CFR Section 60.482-9 (Delay of Repair). (2) A first attempt at repair shall be made no later than 15 calendar days after it is detected, except as provided in 40 CFR Section 60.482-9.	40 CFR Section 60.482-3(g); Minn. R. 7011.2900
STANDARDS: PRESSURE RELIEF DEVICES IN GAS/VAPOR SERVICE	hdr
(a) Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background as determined by the methods specified in 40 CFR Section 60.485(c).	40 CFR Section 60.482-4(a); Minn. R. 7011.2900
(b)(1) After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after the pressure release, except as provided in 40 CFR Section 60.482-9 (Delay of Repair).	40 CFR Section 60.482-4(b); Minn. R. 7011.2900
STANDARDS: SAMPLING CONNECTION SYSTEMS	hdr
(a) Each sampling connection system shall be equipped with a closed-purged, closed-loop, or closed-vent system, except as provided in 40 CFR Section 60.482-1(c).	40 CFR Section 60.482-5(a); Minn. R. 7011.2900

**TABLE A: LIMITS AND OTHER REQUIREMENTS**
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10/25/06

Facility Name: Otter Tail Ag Enterprises LLC

Permit Number: 11100077 - 001

(b) Each closed-purge, closed-loop, or closed-vent system shall: (1) Return the purged process fluid directly to the process line; or (2) Collect and recycle the purged process fluid to a process; or (3) Be designed and operated to capture and transport all the purged process fluid to a control device that complies with the requirements of 40 CFR Section 60.482-10. (c) In situ sampling systems are exempt from these requirements.	40 CFR Section 60.482-5(b) and (c); Minn. R. 7011.2900
STANDARDS: OPEN ENDED VALVES OR LINES	hdr
(a)(1) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in 40 CFR Section 60.482-1(c). (2) The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line.	40 CFR Section 60.482-6(a); Minn. R. 7011.2900
(b) Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed. (c) When a double block and bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with paragraph (a) at all other times.	40 CFR Section 60.482-6(b) and (c); Minn. R. 7011.2900
STANDARDS: VALVES	hdr
(a) Each valve shall be monitored monthly to detect leaks by the methods specified in 40 CFR Section 60.485(b).	40 CFR Section 60.482-7(a); Minn. R. 7011.2900
(b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected. (c)(1) Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected. (2) If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months.	40 CFR Section 60.482-7(b) and (c); Minn. R. 7011.2900
(d)(1) When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 40 CFR Section 60.482-9. (2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.	40 CFR Section 60.482-7(d); Minn. R. 7011.2900
(e) First attempts at repair include, but are not limited to, the following best practices where practicable: (1) Tightening of bonnet bolts; (2) Replacement of bonnet bolts; (3) Tightening of packing gland nuts; (4) Injection of lubricant into lubricated packing.	40 CFR Section 60.482-7(e); Minn. R. 7011.2900
STANDARDS: PUMPS AND VALVES IN HEAVY LIQUID SERVICE, PRESSURE RELIEF DEVICES IN LIGHT LIQUID OR HEAVY LIQUID SERVICE, AND FLANGES AND OTHER CONNECTORS	hdr
(a) Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service and flanges and other connectors shall be monitored within 5 days by the method specified in 40 CFR Section 60.485(b) if evidence of a potential leak is found by visual, audible, olfactory, or any other detection method.	40 CFR Section 60.482-8(a); Minn. R. 7011.2900
(b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected. (c)(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected except as provided in 40 CFR Section 60.482-9 (Delay of Repair). (2) The first attempt at repair shall be made no later than 5 calendar days after each leak is detected.	40 CFR Section 60.482-8(b) and (c); Minn. R. 7011.2900
(d) First attempts at repair include, but are not limited to, the best practices described under 40 CFR Section 60.482-7(e).	40 CFR Section 60.482-8(d); Minn. R. 7011.2900
DELAY OF REPAIR	hdr
(a) Delay of repair of equipment for which leaks have been detected will be allowed if the repair is technically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown. (b) Delay of repair of equipment will be allowed for equipment which is isolated from the process and which does not remain in VOC service.	40 CFR Section 60.482-9(a) and (b); Minn. R. 7011.2900
(c) Delay of repair for valves will be allowed if: (1) The owner or operator demonstrates that emissions of purged material resulting from the immediate repair are greater than the fugitive emissions likely to result from delay of repair, and (2) When repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with 40 CFR Section 60.482-10.	40 CFR Section 60.482-9(c); Minn. R. 7011.2900

**TABLE A: LIMITS AND OTHER REQUIREMENTS**
**A-36**

10/25/06

Facility Name: Otter Tail Ag Enterprises LLC

Permit Number: 11100077 - 001

(d) Delay of repair for pumps will be allowed if: (1) Repair required the use of a dual mechanical seal system that includes a barrier fluid system, and (2) Repair is completed as soon as practicable, but not later than 6 months after the leak was detected.	40 CFR Section 60.482-9(d); Minn. R. 7011.2900
(e) Delay of repair beyond a process unit shutdown will be allowed for a valve, if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than 6 months after the first process unit shutdown.	40 CFR Section 60.482-9(e); Minn. R. 7011.2900
TESTING PROCEDURES	hdr
Compliance shall be determined by the methods specified in 40 CFR Section 60.485.	40 CFR Section 60.486(b); Minn. R. 7011.2900
RECORDKEEPING	hdr
(b) When each leak is detected, the following requirements apply: (1) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment. (2) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in 40 CFR Section 60.482-7(c) and no leak has been detected during those 2 months. (3) The identification on equipment except on a valve may be removed after it has been repaired.	40 CFR Section 60.486(b); Minn. R. 7011.2900
(c) When each leak is detected the following information shall be recorded in a log and shall be kept for 2 years in a readily accessible location: (1) The instrument and operator identification numbers and the equipment identification number. (2) The date the leak was detected and the dates of each attempt to repair the leak. (3) Repair methods applied in each attempt to repair the leak. (4) Above 10,000 is the maximum instrument reading measured by the methods specified in 40 CFR Section 60.485(a) after each repair attempt is equal to or greater than 10,000 ppm.	40 CFR Section 60.486(c); Minn. R. 7011.2900
(5) Repair delayed and the reason for the delay if a leak is not repaired within 15 calendar days after discover of the leak. (6) The signature of the owner or operator whose decision it was that the repair could not be effected without a process shutdown. (7) The expected date of successful repair of the leak if a leak is not repaired within 15 days. (8) Dates of process unit shutdown that occurs while the equipment is unrepaired. (9) The date of successful repair of the leak.	40 CFR Section 60.486(c); Minn. R. 7011.2900
REPORTING REQUIREMENTS	hdr
(a) Each owner or operator subject to the provisions of this subpart shall submit semiannual reports to the Administrator beginning six months after the initial startup date.	40 CFR Section 60.487(a); Minn. R. 7011.2900
(b) The initial semiannual report to the Administrator shall include the following information: (1) Process unit identification, (2) Number of valves subject to the requirements of 40 CFR Section 60.482-7, (3) Number of pumps subject to the requirements of 40 CFR Section 60.482-2, (4) Number of compressors subject to the requirements of 40 CFR Section 60.482-3.	40 CFR Section 60.487(b); Minn. R. 7011.2900
(c) All semiannual reports to the Administrator shall include the following information, summarized from the information in 40 CFR Section 60.486; (1) Process unit identification, (2) For each month during the semiannual reporting period, (i) Number of valves for which leaks were detected as described in 40 CFR Section 60.482(7)(b) or 40 CFR Section 60.483-2, (ii) Number of valves for which leaks were not repaired as required in 40 CFR Section 60.482-7(d)(1), (iii) Number of pumps for which leaks were detected as described in 40 CFR Section 60.482-2(b) and (d)(6)(i), (iv) Number of pumps for which leaks were not repaired as required in 40 CFR Section 60.482-2(c)(1) and (d)(6)(ii),	40 CFR Section 60.487(c); Minn. R. 7011.2900
(v) Number of compressors for which leaks were detected as described in 40 CFR Section 60.482-3(f), (vi) Number of compressors for which leaks were not repaired as required in 40 CFR Section 60.482-3(g)(1), (vii) The facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible.	40 CFR Section 60.487(c); Minn. R. 7011.2900

**TABLE A: LIMITS AND OTHER REQUIREMENTS****A-37**

10/25/06

Facility Name: Otter Tail Ag Enterprises LLC

Permit Number: 11100077 - 001

(3) Dates of process unit shutdowns which occurred within the semiannual reporting period. (4) Revisions to items reported according to paragraph (b) if changes have occurred since the initial report or subsequent revisions to the initial report.	40 CFR Section 60.487(c); Minn. R. 7011.2900
(e) Report the results of all performance tests in accordance with 40 CFR Section 60.8. The provisions of 40 CFR Section 60.8(d) do not apply to affected facilities subject to the provisions of this subpart except that an owner or operator must notify the Administrator of the schedule for the initial performance tests at least 30 days before the initial performance tests.	40 CFR Section 60.487(e); Minn. R. 7011.2900

**TABLE B: SUBMITTALS****B-1** 10/25/06

Facility Name: Otter Tail Ag Enterprises LLC  
Permit Number: 11100077 - 001

Table B lists most of the submittals required by this permit. Please note that some submittal requirements may appear in Table A or, if applicable, within a compliance schedule located in Table C. Table B is divided into two sections in order to separately list one-time only and recurrent submittal requirements.

Each submittal must be postmarked or received by the date specified in the applicable Table. Those submittals required by parts 7007.0100 to 7007.1850 must be certified by a responsible official, defined in Minn. R. 7007.0100, subp. 21. Other submittals shall be certified as appropriate if certification is required by an applicable rule or permit condition.

Send any application for a permit or permit amendment to:

AQ Permit Technical Advisor  
Industrial Division  
Minnesota Pollution Control Agency  
520 Lafayette Road North  
St. Paul, Minnesota 55155-4194

Also, where required by an applicable rule or permit condition, send to the Permit Technical Advisor notices of:

- accumulated insignificant activities,
- installation of control equipment,
- replacement of an emissions unit, and
- changes that contravene a permit term.

Unless another person is identified in the applicable Table, send all other submittals to:

AQ Compliance Tracking Coordinator  
Industrial Division  
Minnesota Pollution Control Agency  
520 Lafayette Road North  
St. Paul, Minnesota 55155-4194

Send submittals that are required to be submitted to the U.S. EPA regional office to:

Mr. George Czerniak  
Air and Radiation Branch  
EPA Region V  
77 West Jackson Boulevard  
Chicago, Illinois 60604

Send submittals that are required by the Acid Rain Program to:

U.S. Environmental Protection Agency  
Clean Air Markets Division  
1200 Pennsylvania Avenue NW (6204N)  
Washington, D.C. 20460

**TABLE B: ONE TIME SUBMITTALS OR NOTIFICATIONS**
**B-2** 10/25/06

Facility Name: Otter Tail Ag Enterprises LLC

Permit Number: 11100077 - 001

What to send	When to send	Portion of Facility Affected
Notification of the Actual Date of Initial Startup	due 15 days after Initial Startup.	GP001
Notification of the Date Construction Began	due 30 days after Start Of Construction. Submit the name and number of each unit and the date construction of each unit began.	GP001
Testing Frequency Plan	due 60 days after Initial Performance Test for CO emissions. The plan shall specify a testing frequency based on the test data and MPCA guidance. Future performance tests based on one-year (12 month), 36 month, and 60 month intervals, or as applicable, shall be required upon written approval of the MPCA.	CE030, EU028, EU029
Testing Frequency Plan	due 60 days after Initial Performance Test for NOx emissions. The plan shall specify a testing frequency based on the test data and MPCA guidance. Future performance tests based on one-year (12 month), 36 month, and 60 month intervals, or as applicable, shall be required upon written approval of the MPCA.	CE030, EU028, EU029
Testing Frequency Plan	due 60 days after Initial Performance Test for PM emissions. The plan shall specify a testing frequency based on the test data and MPCA guidance. Future performance tests based on one-year (12 month), 36 month, and 60 month intervals, or as applicable, shall be required upon written approval of the MPCA.	CE030, SV001, <del>SV002, SV003, SV004, SV005, SV006, SV007, SV008, SV009, SV010, SV011</del>
Testing Frequency Plan	due 60 days after Initial Performance Test for PM10 emissions. The plan shall specify a testing frequency based on the test data and MPCA guidance. Future performance tests based on one-year (12 month), 36 month, and 60 month intervals, or as applicable, shall be required upon written approval of the MPCA.	SV001, <del>SV002, SV003, SV004, SV005, SV006, SV007, SV008, SV009, SV010</del>
Testing Frequency Plan	due 60 days after Initial Performance Test for PM10 emissions. The plan shall specify a testing frequency based on the test data and MPCA guidance. Future performance tests based on one-year (12 month), 36 month, and 60 month intervals, or as applicable, shall be required upon written approval of the MPCA.	SV011
Testing Frequency Plan	due 60 days after Initial Performance Test for VOC emissions. The plan shall specify a testing frequency based on the test data and MPCA guidance. Future performance tests based on one-year (12 month), 36 month, and 60 month intervals, or as applicable, shall be required upon written approval of the MPCA.	CE030
Testing Frequency Plan	due 60 days after Initial Performance Test for VOC emissions. The plan shall specify a testing frequency based on the test data and MPCA guidance. Future performance tests based on one-year (12 month), 36 month, and 60 month intervals, or as applicable, shall be required upon written approval of the MPCA.	SV026
Testing Frequency Plan	due 60 days after Initial Performance Test for VOC emissions. The plan shall specify a testing frequency based on the test data and MPCA guidance. Future performance tests based on one-year (12 month), 36 month, and 60 month intervals, or as applicable, shall be required upon written approval of the MPCA.	SV027

**TABLE B: RECURRENT SUBMITTALS****B-3** 10/25/06

Facility Name: Otter Tail Ag Enterprises LLC

Permit Number: 11100077 - 001

What to send	When to send	Portion of Facility Affected
Semiannual Deviations Report	due 30 days after end of each calendar half-year following Permit Issuance. The first semiannual report submitted by the Permittee shall cover the calendar half-year in which the permit is issued. The first report of each calendar year covers January 1 - June 30. The second report of each calendar year covers July 1 - December 31. If no deviations have occurred, the Permittee shall submit the report stating no deviations.	Total Facility
Compliance Certification	due 30 days after end of each calendar year following Permit Issuance (for the previous calendar year). To be submitted to the Commissioner on a form approved by the Commissioner. This report covers all deviations experienced during the calendar year.	Total Facility



APPENDIX MATERIAL

Facility Name: Otter Tail Ag Enterprises LLC

Permit Number: 11100077-001

**Appendix I: Insignificant Activities**

**Insignificant Activities and Applicable Requirements**

<b>Minn. R. 7007.1300, subpart</b>	<b>Rule Description of the Activity</b>	<b>Applicable Requirement</b>
3(A)	Fuel use: space heaters fueled by propane may be used in the winter to defrost equipment. <i>Less than 30,000 MMBTU/hr capacity.</i>	Minn. R. 7011.0510/0515
3(E)	Storage tanks:	
	Gasoline storage tanks with a combined total tankage capacity of not more than 10,000 gallons; <i>The facility may have gasoline storage tanks for lawn mowers and other small equipment in portable 1-10 gallon fuel cans.</i>	Minn. R. 7011.0710/0715
3(G)	Emissions from a laboratory, as defined in the subpart. <i>The facility will have a product testing laboratory.</i>	Minn. R. 7011.0510/0515 + Minn. R. 7011.0610 + Minn. R. 7011.0710/0715
3(H)	Miscellaneous:	
	Brazing, soldering or welding equipment; <i>The facility may perform welding activities associated with facility maintenance.</i>	Minn. R. 7011.0510/.0515 + Minn. R. 7011.0610 + Minn. R. 7011.0710/0715
	Blueprint copiers and photographic processes; <i>Normal scale office equipment will be present at the facility office.</i>	Minn. R. 7011.0105/0110
3(J)	Fugitive Emissions from roads and parking lots. <i>All main facility haul roads will be paved. There may exist pull-offs, parking spaces, or unpaved areas where a vehicle could drive, but does not do so on a regular basis.</i>	Minn. R. 7011.0150
3(K)	Infrequent use of spray paint equipment for routine housekeeping or plant upkeep activities not associated with primary production processes at the stationary	Minn. R. 7011.0710/0715

<b>Minn. R. 7007.1300, subpart</b>	<b>Rule Description of the Activity</b>	<b>Applicable Requirement</b>
	<p>source, such as spray painting of buildings, machinery, vehicles, and other supporting equipment.</p> <p><i>Small scale spray painting may occur, but only associated with construction of maintenance activities.</i></p>	

### Additional Pre-Approved Insignificant Activities

<b>Insignificant Activity</b>	<b>General Applicable Emission limit</b>	<b>Discussion</b>
Fuel use: space heaters fueled by, kerosene, natural gas, or propane	$PM \leq 0.6$ or $0.4$ lb/MMBtu, depending on year constructed $Opacity \leq 20\%$ with exceptions (Minn. R. 7011.0510/515)	For this unit, based on the fuels used and EPA published emissions factors, it is highly unlikely that it could violate the applicable requirement. In addition, these types of units are typically operated and vented inside a building, so testing for PM or opacity is not feasible.
Infrared electric ovens	$Opacity \leq 20\%$ (Minn. R. 7011.0105 or 7011.0110)	These units are not likely to have any emissions of particulate matter at this site (used to dry off VOCs). It is highly unlikely that they could violate the applicable requirement.
Fuel burning equipment with a capacity less than 500,000 Btu/hour, etc.	$PM \leq 0.6$ or $0.4$ , depending on year constructed $Opacity \leq 20\%$ with exceptions (Minn. R. 7011.0510/515)	For these units, based on the fuels used and EPA published emissions factors, it is highly unlikely that they could violate the applicable requirements.
Cleaning operations: commercial laundries, not including dry cleaners and industrial launderers	$Opacity \leq 20\%$ (Minn. R. 7011.0105 or 7011.0110)	While no known emissions estimation method exists for these units, based on general knowledge of how they operate, it is highly unlikely that they could generate visible emissions.
Emissions from a laboratory, as defined in Minn. R. 7007.1300, subp. 3(G)	PM, variable depending on airflow $Opacity \leq 20\%$ (Minn. R. 7011.0710/715)	These are very small, intermittent, bench-top operations that typically do not even have any emissions. It is highly unlikely that they could violate the applicable requirement.
Open tumblers with a batch capacity of 1,000 pounds or less	PM, variable depending on airflow $Opacity \leq 20\%$	For these units, it is highly unlikely that they could violate the applicable requirement. In addition, these units are vented inside a

Insignificant Activity	General Applicable Emission limit	Discussion
	(Minn. R. 7011.0710/715)	building, so testing for PM or opacity is not feasible.
Equipment used for hydraulic or hydrostatic testing	PM, variable depending on airflow Opacity $\leq$ 20% (Minn. R. 7011.0710/715)	While no known emissions estimation method exists for these units, based on general knowledge of how they operate, it is highly unlikely that they could generate particulate matter. In addition, these units would be operated and vented directly into a building, so testing is not feasible.
Brazing, soldering or welding equipment	PM, variable depending on airflow Opacity $\leq$ 20% (Minn. R. 7011.0710/715)	For these units, based on EPA published emissions factors, it is highly unlikely that they could violate the applicable requirement. In addition, these units are typically operated and vented inside a building, so testing for PM or opacity is not feasible.
Blueprint copiers and photographic processes	Opacity $\leq$ 20% (Minn. R. 7011.0105 or 7011.0110))	While no known emissions estimation method exists for these units, based on general knowledge of how they operate, it is highly unlikely that they could generate visible emissions. In addition, these units would be operated and vented directly into an office area, so monitoring or testing is not feasible.
Cleaning operations: alkaline/phosphate cleaners and associated burners	PM, variable depending on airflow Opacity $\leq$ 20% (Minn. R. 7011.0610+ Minn. R. 7011.0710/715)	For these units, there are some factors available for the burners, but very little information regarding the cleaning operation itself. However, based on general knowledge of how they operate, it is highly unlikely that they could violate the applicable requirement or that testing would be feasible.
Individual units with actual emissions less than 2000 lb/year of certain pollutants	PM, variable depending on airflow Opacity $\leq$ 20% (with exceptions) (Minn. R. 7011.0715 and Minn. R. 7011.610) or SO <sub>2</sub> $\leq$ 0.5 lb/MMBtu Opacity $\leq$ 20% (Minn. R. 7011.2300)	These are 4 natural gas combustion units, an emergency generator, and a specialty mixing area. For the natural gas units and generator, based on the fuels used and EPA published emissions factors, it is highly unlikely that they could violate the applicable requirement. In addition, all of these units are operated and vented inside a building, so testing for PM or opacity is not feasible. The mixing area is not expected to generate particulate matter.
Infrequent use of spray paint equipment for routine housekeeping or plant upkeep activities not	PM, variable depending on airflow or process weight rate Opacity $\leq$ 20%	While spray equipment will have the potential to emit particulate matter, these particular activities are those not associated with production, so they would be infrequent and

<b>Insignificant Activity</b>	<b>General Applicable Emission limit</b>	<b>Discussion</b>
associated with primary production processes at the stationary source	(Minn. R. 7011.0715)	usually occur outdoors. Testing or monitoring is not feasible.
Equipment venting PM/PM <sub>10</sub> inside a building, provided that emissions from the equipment are: a). filtered through an air cleaning system; and b). vented inside of the building 100% of the time	PM, variable depending on airflow Opacity ≤ 20% (Minn. R. 7011.0715)	For these units, it is highly unlikely that they could violate the applicable requirement. In addition, these units are vented inside a building, so testing for PM or opacity is not feasible.

## Appendix II: NSPS Subpart IIII Definitions

### § 60.4219

**Emergency stationary internal combustion engine** means any stationary internal combustion engine whose operation is limited to emergency situations and required testing and maintenance. Examples include stationary ICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary ICE used to pump water in the case of fire or flood, etc. Stationary CI ICE used to supply power to an electric grid or that supply power as part of a financial arrangement with another entity are not considered to be emergency engines.

**Engine manufacturer** means the manufacturer of the engine. See the definition of “manufacturer” in this section.

**Fire pump engine** means an emergency stationary internal combustion engine certified to NFPA requirements that is used to provide power to pump water for fire suppression or protection.

**Manufacturer** has the meaning given in section 216(1) of the Act. In general, this term includes any person who manufactures a stationary engine for sale in the United States or otherwise introduces a new stationary engine into commerce in the United States. This includes importers who import stationary engines for sale or resale.

## Appendix III Modeling Data



Microsoft Excel  
Worksheet

## Appendix IV: Odor Management Plan



Otter Tail Odor BMP  
Plan.pdf